Digitized by the Internet Archive
in 2014

https://archive.org/details/b19974760M3015

The CHEMIST AND DRUGGIST

Established 1859
28 Essex Street, Strand, London, W.C.2
Registered as a Newspaper

No. 2891
VOL. CXXIII
JULY 6, 1935
Annual Subscription (with Diary) 20/-. Single Copies 9d.

Compass Brand
Reqd.
COMPRESSED TABLETS

ATTRACTIVE SHOW OUTERS

COMPASS BRAND
BEST ON ALL POINTS

QUALITY & ACCURACY

HIRST, BROOKE & HIRST LTD.
MANUFACTURING CHEMISTS
SHEEPSCAR WORKS LEEDS 7
PHONE · 31155 (6 LINES)

Index to Advertisers, pp. 5 & 6.

SEND
FOR
TERMS

PARKE, DAVIS
& COMPANY.
50 BEAK ST.,
LONDON
W.I.

ThinK

VIII PENCE FOR XII TUBES

HAX
FULL 5 GRAIN TABLETS OF
ASPIRIN
BRITISH PHARMACOPOEIA STANDARD
EASY TO SWALLOW
ALSO SOLD IN BOTTLES OF 30. 70. Etc.
EDWARD HACK LTD., 73 to 78,
HIGH HOLBORN, LONDON, W.C.1
HAX
ASPIRIN
BRITISH

FULL 5 GRAIN
B.P. STANDARD
LONDON MADE
TEN TABLETS IN
EACH GLASS TUBE

2/- FOR

THREE DOZEN
TUBES IN THIS
DISPLAY OUTER

HOW MUCH ARE YOU PAYING?

ORDER TODAY FROM YOUR WHOLESALER

WHOLESALE HOUSES ONLY SUPPLIED DIRECT BY THE
PROPRIETORS OF HAX AND ANTI-THRAX PRODUCTS
EDWARD HACK LTD. 73 TO 78 HIGH HOLBORN
LONDON W.C.1. HOLBORN 1000, 6000, 9000

C&D

another beauty product

advertised by samson clarks

Modern photography and modern ideas are now combining to form a most successful advertising campaign for the world's most modern shampoo—AVA.
AVA Advertising is handled by Samson Clarks, whose years of specialised experience with pharmaceutical products make them ideally suited to advertise your line. If that product does not compete with AVA, we should welcome an opportunity of discussing its possibilities with you.

SAMSON CLARK & CO. LTD.
INCORPORATED PRACTITIONERS IN ADVERTISING
57-61 MORTIMER STREET, LONDON, W.1.

enter SKOL

SUN LOTION

SKOL IS DIFFERENT—

SKOL contains no oil or cream — it invisibly protects the skin while encouraging a healthful and longer-lasting natural tan.

SKOL IS BETTER—

it was tested on 110 persons in the strong sunshine of Bermuda against 14 leading preparations on the market and proved 88% better than the other preparations.

SKOL WILL BE REGULARLY ADVERTISED

in the popular national press.

●

SKOL DISPLAYS

McKNIGHT KAUFFER the famous artist has prepared an unusual and distinctive showcard. In addition descriptive leaflets and window bills are available.

SKOL GIVES YOU **33⅓**% PROFIT

RETAIL PRICE	2/-	3/6	6/6
TRADE PRICE (per doz.)	16/-	28/-	52/-

Manufactured by
SKOL PRODUCTS LIMITED, Manufacturing Chemists, London.

Packed and distributed by

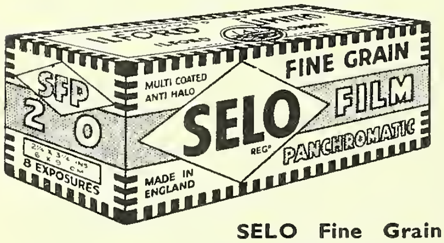
SCRUBB & CO. LTD. GLASSHOUSE STREET, LAMBETH, S.E.11.
To whom you should write for details of attractive Bonus Scheme

The VERSATILE SELO FAMILY

a film for every photographic occasion

SELO the fast ROLL FILM

A fast film possessing great latitude. Wholly dependable for all-round "snap-shotting."



SELO Fine Grain PANCHROMATIC ROLL FILM

Specially prepared for miniature cameras, this film enables enlargements to be made up to any reasonable size without trace of grain or "mealiness."

SELOCHROME Extra Fast ROLL FILM

Multi-coated, highly orthochromatic and anti-halation backed—makes fast work easy under difficult conditions.

SELO Hypersensitive PANCHROMATIC ROLL FILM

The fastest film made. Selo Hypersensitive makes instantaneous photography practical in dull light and by artificial illumination. It is completely and evenly colour sensitive.

Made in England by ILFORD LIMITED . ILFORD . LONDON

INDEX TO ADVERTISERS

Armstrong Cork Co., Ltd. (Corks) 8
Aspro, Ltd. (Aspro) ix
Association of Manfg. Chemists, Ltd. Col. Supp.

Baird, J., & Sons (Sunproof Goggles) xvi
Barker, R., & Son, Ltd. (Infants' Preservative) 8
Bayer Products, Ltd. (Phenacetin) 7
Beaucaire Laboratories (Stain Remover) 19
Beechams Pills, Ltd. (Beecham Products) xiii
Bell, John, Hills & Lucas, Ltd. (Colloidal Sunburn Lotion) ....Leader Page
Berdoe & Fish, Ltd. (Valuers, &c.) Col. Supp.
Berton, Arthur, Ltd. (Sanitary Towels) xiv
Blackwell, Hayes & Co., Ltd. (Galenicals, &c.) ii
Brady & Martin, Ltd. (Galenicals, &c.) vi
British Drug Houses, Ltd., The (Salinax) 24
British Xylonite Co., Ltd. (Halex Tooth Brushes) 13
Brook, Parker & Co., Ltd. (Tablets, Pills, &c.) vi
Burall Bros. (D. & P. Service) 20
Burge, Warren & Ridgley, Ltd. (Surgical Rubber Goods) 20
Burrough, James, Ltd. (Alcohol for Perfumery) ......Leader Page
Burroughs Wellcome & Co. ('Hazeline' Cream, &c.) 23
Caldicot Tin Stamping Works, Ltd. (Decorated Tins) xvii
Camwal, Ltd. (Table Waters)...Leader Page
Cataline Co., Ltd. (Veterinary Medicines) 8
Christy, T., & Co., Ltd. (Estivin) 20
Clark, S. F. (Valuer, &c.) ....Col. Supp.
Cook, Geo. (Shopfittings) 20
Cox, A. H., & Co., Ltd. (Marienbad Slimming Tablets) ......Cover

Dalmas, A. de St., & Co., Ltd. (Elastic Corn Straps) 20
Daniel, R., & Son, Ltd. (Dania Brand Compressed Tablets) 8
Dominion Steel Corporation, Ltd. (Razor Blades) ......Leader Page
Dudley & Co., Ltd. (Display Fittings) Leader Page
Duncan, Flockhart & Co. (Baumol Medicated Soaps) iv

Elboz, L., & Son (Metal Smallwares) ... 8
Elfrida Perfumery Co. (Beauty Preparations) 9
Erasmic Co., Ltd. (Peerless Soap, &c.) 22
Ex-Lax, Ltd. (Laxative Chocolate) vii

Fairy Dyes, Ltd. (Dyes) viii
Fassett & Johnson, Ltd. (Ovoferrin) ... x
Ferber, Robert, Ltd. (Capsules) vii
Fink, F., & Co. (Gums) 20
Ford, Shapland & Co., Ltd. ("Solvo" Toilet Paper) xvi
Freudentheil, Smith & Co. (C.L.O.) ... 20
Fromm, H. (Morfi Rubber Products, &c.) xviii

Gardiner & Co. (The Scotch House), Ltd. (Overalls) xii
George, Ernest J., & Co. (Valuer, &c.) Col. Supp.

Hack, Edward (Aspirin Tablets) 1
Hackett, S. E. (Film Overstocks) Col. Supp.
Harwoods (Chemists), Ltd. (Effalgen)... iv
Heriot-Watt College xii
Hirst, Brooke & Hirst, Ltd. (Compressed Tablets) ......Cover
Holroyd's Oil and Cerasine Co., Ltd. (Liquid Paraffin, &c.) vi
Hopkin & Williams, Ltd. (Chemicals)... ii
Hough, Hoseason & Co., Ltd. (Nalgo Antiseptic) 5
Hubbuck, T., & Son, Ltd. (Oxide of Zinc) iii

Iglodine Co., Ltd. (Iglodine) x
Ilford, Ltd. (Selo Films) 4

Jacquesil Fabrics, Ltd. (Dawn Face Cloths) 15
Johnson & Johnson (Gt. Britain), Ltd. (Ortho-gynol) xv

[*Continued overleaf.*

The ANTISEPTIC
NALGO
FOR ALL OCCASIONS THE IDEAL GARGLE AND ANTISEPTIC
NALGO
THE SAFEST AND BEST FOR ALL OCCA
DIRECTIONS FOR USE
HOUGH, HOSEASON & Co Ltd
MANCHESTER

AN EVER WIDENING CIRCLE...

The fact that the medical and dental professions regularly use this new and unique antiseptic in their own surgeries as well as recommend it to their patients, is a sure indication of its worth. Skilful propaganda steadily maintained means definite enquiries for

NALGO

THE ANTISEPTIC

It merits your attention and recommendation because it is absolutely safe—definitely kills pain—stops swellings and quickly subdues inflammation. There is a good margin of profit and you can obtain direct or from your usual wholesaler.
Packed in two sizes, 10½d. or 1/6

If you would like interesting literature we invite your enquiries for

TAB. ARTHRITONE — for Rheumatoid Arthritis and allied Rheumatic conditions.
Gives results where other methods of treatment have failed.

	100	250	500	1,000
Price ...	4/6d.	8/2d.	16/-	30/-

TAB. CHELIDON CO. — for Gall Stones.
Excellent results in Gall stones, affording endless opportunity to enterprising Chemists.
Price, in bulk, 32/- per 1,000 nett.

HOUGH, HOSEASON & CO., LTD.
TRADE AND EXPORT ENQUIRIES INVITED
Manufacturing Chemists, MANCHESTER 3

INDEX—cont.

Jones & Co. (Methylators), Ltd. (Methylated Spirit) vi
Josephs, Philip, & Sons, Ltd. (Shopfittings) .... Col. Supp.

Lamb & Watt, Ltd. (Egg-Nog Tonic Wine) xi
Levermore, A., & Co., Ltd. (Precipitated Chalk) 20
London College of Pharmacy xii
Low, Son & Haydon, Ltd. (Toilet Preps.) 20
Luft Tangee, Ltd. (Toilet Preparations) 12

Macleans, Ltd. (Solid Dentifrice) 11
Matthews, D., & Son (Shopfittings) Col. Supp.
Maund, F., & Berg, E., Ltd. (Showcases) .... Col. Supp.
Meggeson & Co., Ltd. (Fruit Salines, &c.) i
Menley & James, Ltd. ("Iodex," &c.) viii
Monsanto Chemicals, Ltd. (Organic Chemicals) .... Cover

Nestlé & Anglo-Swiss Condensed Milk Co. (Lactogen) xi

Orridge & Co. (Valuers, &c.) .... Col. Supp.

Papier Poudré, Ltd. (Papier Poudré) ... 15
Parke, Davis & Co. (Euthymol) .... Cover
Perry & Hope, Ltd. (Phosphate of Soda) vi
Potter & Clarke, Ltd. (Wholesale Druggists) 21
Prideaux's, Ltd. (English Dried Milk) xi
Prince Regent Tar Co., Ltd. (Disinfectants) 6

Raleigh Cycle Co., Ltd. (Delivery Cycles) 10
Rapidol, Ltd. (Inexide Peroxide of Hydrogen) 20
Reid, T., & Sons (Bamyl Shaving Soap, &c.) 15
Roberts' Patent Filling Machine Co. ... x
Robinson & Sons, Ltd. (Boxes, &c.)...xii-xiv
Rowland, A., & Sons, Ltd. (Macassar Oil) 14
Rutherford, J., & Co., Ltd. (Locarno Toilet Roll) xiv

Samson, Clark & Co., Ltd. (Advertising Agents) 2
Scott, R. M. (Ipswich), Ltd. (Charcoal Biscuits) 20
Scrubb & Co., Ltd. (Skol Sun Lotion) 3
Scurr, C. A. (Optical Tuition) 20
Seajoy Co. (Seasickness Remedy) x
Shadeine Co. (Hair Dyes) 20
Sharplin, W. J., Ltd. (Stoppers) xiv
Shawyer & Blake (D. & P. Service) ... 20
Smith, T. & H., Ltd. (Alkaloids) iii
Solport Bros., Ltd. (Portia Corn Plasters) xvii
Southalls (Birmingham), Ltd. (Sanitary Towels) xvii
Sterns, Ltd. (Oils, Petroleum) iv
Sturge, J. & E., Ltd. (Citric Acid) ... ii
Sumner's Typhoo Tea, Ltd. ...Leader Page
Swiftsure Photographic Works, Ltd. (D. & P. Service) 14

Thomas & Linton, Ltd. (Everhot Bags, &c.) 20
Thornton & Ross, Ltd. (Pennine Toilet Series) 12
Tillotts Laboratories (White Tar Brand Ointment) 8
Tragasol Products, Ltd. (Toilet Cream) 15

Vinolia Co., Ltd. (Soaps) 17
Viscose Development Co., Ltd. (Viskaps Bottle Capsules) 14

Waide, Thos., & Sons, Ltd. (Printing) 18
Webb, Wm. A., Ltd. ("White Monarch" Balance) xvii
Westminster College of Pharmacy xii
Whiffen & Sons, Ltd. (Bromides, &c.) v
Wilcox, Jozeau & Co. (Foreign Proprietaries) .... Leader Page
Woolley, J., Sons & Co., Ltd. (Nurona Sun Tan Cream) 16

Yvonne, W. J., et Cie, Ltd. (Toilet Preparations) 15

Zimmermann, A. & M. (Chemicals) ii

When you tender for **DISINFECTANTS**

to Hospitals, Public Institutions, Local Councils, &c.

REMEMBER that

Burt, Boulton & Haywood LTD.

give you special terms for contracts.

Carbolic Disinfecting Fluids containing 3% to 80% Tar Acids.
White Disinfecting Fluids—miscible in salt, fresh or brackish water, Co-efficients 10/12, 18/20, 20/22, 24/26.
Lysol B.P. Quality. Pine Disinfecting Fluids.
Pink Carbolic Disinfecting Powders containing 5% to 20% Tar Acids.
Creosote Disinfecting Powders containing 5% to 20% Tar Acids.
Carbolic Disinfecting Fluids, Rideal Walker Co-efficients 2 to 20.
Liquid Carbolic and Cresylic Acid, Dark 95/97% and Pale 97/99%.
Sulphur Candles. Formaldehyde (Formalin) 40% Solution.
Formaldehyde (Formalin) Tablets. Liquid Soaps.
SOLUBLE Carbolic or Pine Blocks for road watering vans.
Carbolic Weed Killer, etc.

Tar Acids and Rideal Walker Co-efficiency guaranteed. May be sold by Chemists and Druggists under own name.

Special Disinfectant Fluids approved by the Ministry of Agriculture under the "Diseases of Animals Acts." May be packed and sold by Chemists under own name.

SAMPLES AND PRICES ON APPLICATION TO

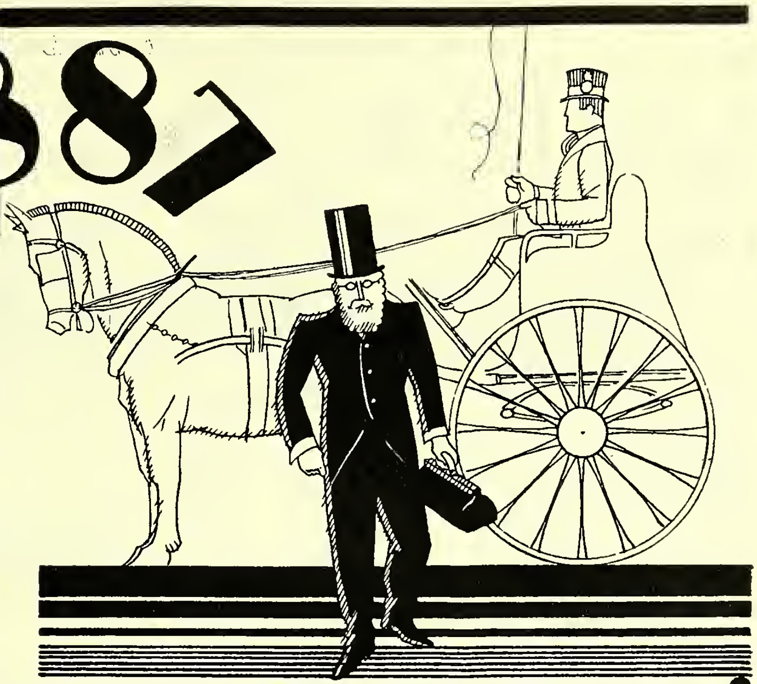
PRINCE REGENT TAR COMPANY, LTD.

(Managers: BURT, BOULTON & HAYWOOD, LTD.)

BRETTENHAM HOUSE, WELLINGTON ST., STRAND, LONDON, W.C.2

Phone Temple Bar 5801 (5 lines) ***Telegrams: "Burboul, Rand, London."***

1887



FORTY-EIGHT YEARS AGO BAYER INTRODUCED

'PHENACETIN'

48 years of manufacturing experience enable 'Bayer' to offer 'Phenacetin' of a quality which is unvarying and unsurpassed. Needless to say, 'Bayer' Phenacetin complies fully with the requirements of the British Pharmacopœia. Specify the **original** brand—'Bayer.'

THE ORIGINAL PRODUCT IS OBTAINABLE FROM BAYER PRODUCTS LTD.

BAYER PRODUCTS LTD.
BAYER
LONDON

AFRICA HOUSE, KINGSWAY,
LONDON, W.C.2

It will pay you to buy DIRECT from the Manufacturers

Dania REGD. BRAND

COMPRESSED TABLETS

If you are wanting any variety of compressed Tablets—true to formula—of the purest materials—finest finish and at lowest prices consistent with quality, then send an enquiry to:—

RICHARD DANIEL & SON, LIMITED

Phone • Derby 2222 (3 lines) • Grams • Dania Derby • MANSFIELD Rd. DERBY •

MAKERS TO THE TRADE—ESTABLISHED 1860

Customers will be Asking for this Skin Ointment!

WHITE TAR

Brand Ointment (Regd.)

FOR ALL SKIN TROUBLES

Stocked by the leading Wholesalers. Sold in Tins 1/-, 2/- and 5/-. Supplies can be forwarded direct per return (post free) and charged through usual wholesalers.

A NATIONALLY ADVERTISED PRODUCT

TILLOTT'S LABORATORIES, 70 MARSHAM ST., WESTMINSTER, S.W.1

ESTABLISHED 1793.

ATKINSON & BARKER'S INFANTS' PRESERVATIVE

The Best and Safest Infants' Medicine of 140 years' standing.

Does not contain any Scheduled Poison.

ROBERT BARKER & SON, LTD.,
13 WESLEY ST., C. on M., MANCHESTER.

Cataline prevents and cures inflammatory Diseases in Cattle

TO THE TRADE P.A.T.A. PRICES!

Are *you* stocking

CATALINE?

If not, now is the time to send us your orders.

During this month we are posting 200,000 circulars to 200,000 Farmers and all Live Stock Owners.

Many of these are your customers.

They will be asking YOU for CATALINE

Cataline pleases Your Customers. The Sales will Please You.

IS WHAT **CATALINE** YOU WANT

One Size. One Price. Retailed at Face Value, namely 3/9 per bott.

Cases Free. Carriage Paid.

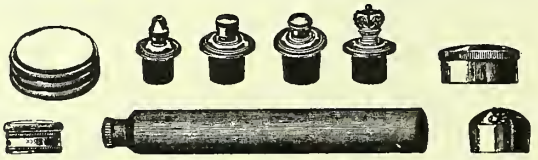
Our best cash with order, carriage paid, prices are:—

1 dozen	3 dozen	6 dozen	12 dozen
36/-	35/6 per doz.	35/- per doz.	34/6 per doz.

Stocked by most Wholesale Houses

Sole Makers:

THE CATALINE CO., LTD., BRISTOL



FOR BRITISH MADE METAL SMALL-WARES OF EVERY DESCRIPTION

GET IN TOUCH WITH

L. ELBOZ & SON

MANUFACTURERS, MERCHANTS & AGENTS

"RAYON D'OR" WORKS

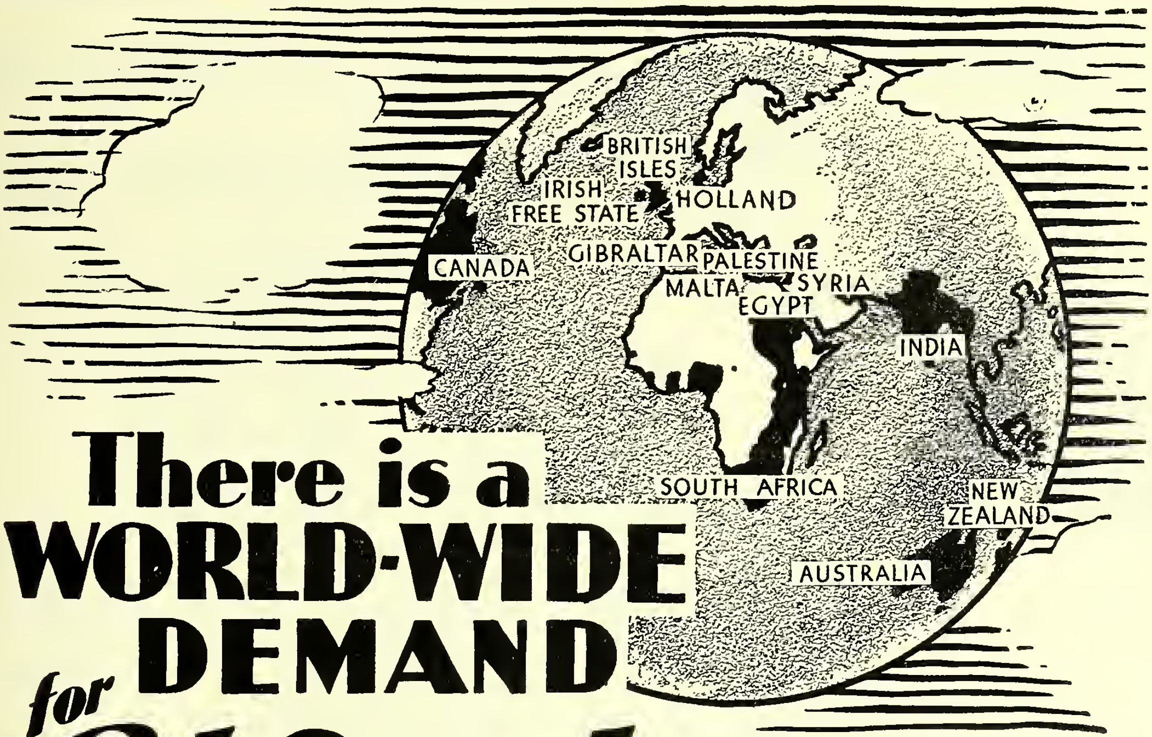
Tel.: Brixton 3456

94 FERNDENE ROAD,
LONDON, S.E.24

Armstrong's

TAPER Ⓐ CORKS

ARMSTRONG CORK CO. LTD.,
ALDWYCH HOUSE, LONDON, W.C.2



There is a WORLD-WIDE DEMAND *for* *Elfrida* BEAUTY PREPARATIONS

Elfrida is the biggest value ever offered to the public in beauty preparations, which accounts for the enormous Elfrida sales. Supported by continuous advertising the Elfrida series includes Powder Cream, Rouge Compacts, Lipsticks, Face Powder, Solid Brilliantine, Perfumes, etc., etc., at retail prices of **2d., 3d.** and **6d.** The quality is the best and the presentation most attractive.

Another new line has been added to the Elfrida series and we recommend you to ask our traveller for the fullest information.

ARE YOU SECURING YOUR SHARE OF

THE PROFITABLE ELFRIDA BUSINESS

Elfrida series can be obtained through all the usual wholesalers or parcels are sent carriage paid £2 nett value. "Elfrida" eclipses everything in perfumery value. Get your share of the Elfrida business by writing to-day to:

ELFRIDA PERFUMERY COMPANY, RAWDON, LEEDS

"I always judge a store by the reliability and promptness of its deliveries!"

THAT'S HOW THE SMART-LOOKING RALEIGH WINS CUSTOM!

Remember the onus of any transaction rests with you until the goods are delivered. That's where the Raleigh helps. Raleigh deliveries are reliable, *punctual* deliveries. Economical too. It's the extra-quality in Raleigh materials—the extra heavy enamelling and finish—that accounts for their long life and smart appearance—that makes them a virile advertisement wherever they are seen. It's as important to specify RALEIGH Carriers as it is to buy your stock competitively and keenly.

LOW GRAVITY CARRIER

£6 . 19 . 6 (*Cash*)

or 12 monthly payment of 14/- (no deposit) (22" Frame). Specially designed for carrying heavy or bulky loads without skidding—20" front wheel and larger basket fitment. An instantly operated stand built into the carrier is an important feature. Every Raleigh Carrier Cycle has the finest equipment, BROOKS' SADDLE, DUNLOP TYRES, etc.

STANDARD CARRIER

(22" Frame). At the same price and terms. Basket can be supplied at extra charge of 7/6.

RALEIGH

THE ALL-STEEL BICYCLE

THE RALEIGH CYCLE CO. LTD., NOTTINGHAM. Depots and Agents everywhere.

Announcing
An Advertising Campaign
for

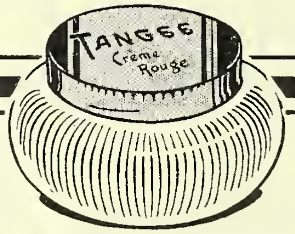
Beginning this week!

Beginning during this first week in July, advertisements for Macleans Solid Peroxide Dentifrice will appear in a wide range of women's magazines. We believe it will pay you to see that Macleans predominates in your orders for solid dentifrice this month

Send your orders to *Telephone: Ealing 6616*

MACLEANS LTD., GREAT WEST ROAD, BRENTFORD, MIDDX.

THE MOST NATURAL AND MOST PERMANENT OF ALL ROUGES



TANGEE

Crème Rouge

Retail price reduced from

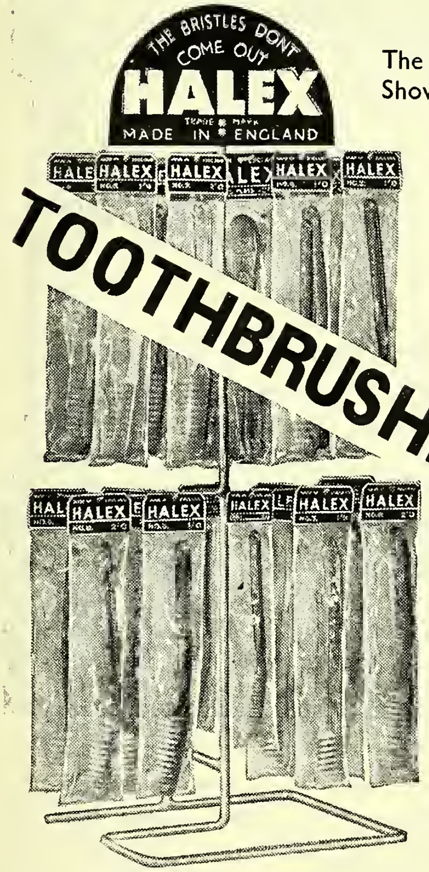
4/6 TO 3/6 PER JAR

● *All communications should now be addressed to: LUFT-TANGEE LTD., 88 Regent Street, London, W.1*
Telephone: Regent 2265. Works: Johnson's Place, Pimlico, S.W.1

THORNTON & ROSS LTD. MILNSBRIDGE, HUDDERSFIELD

This should be on YOUR counter—

IS IT?



The new Halex Showstand

and the new Halex cellophane packs

THE HALEX RANGE

Nine Toothbrushes.
A dental plate brush.
Two shaving brushes and the
new pneumatic Hairbrush.

TOOTHBRUSHES OFF THE PEG!

The new Halex Showstand does not take up much room on your counter or in your window. But it displays every brush in the Halex range. Every brush can be seen and felt. But no brush can be touched by hand until it is sold and opened. The cellophane pack keeps every brush hygienically clean. This showstand is free with an order of three dozen brushes or more. And when you order Halex, will you remember the three Bob brushes —long head, short head and the new prophylactic? Whatever shape each customer prefers—here it is for a shilling.

HALEX

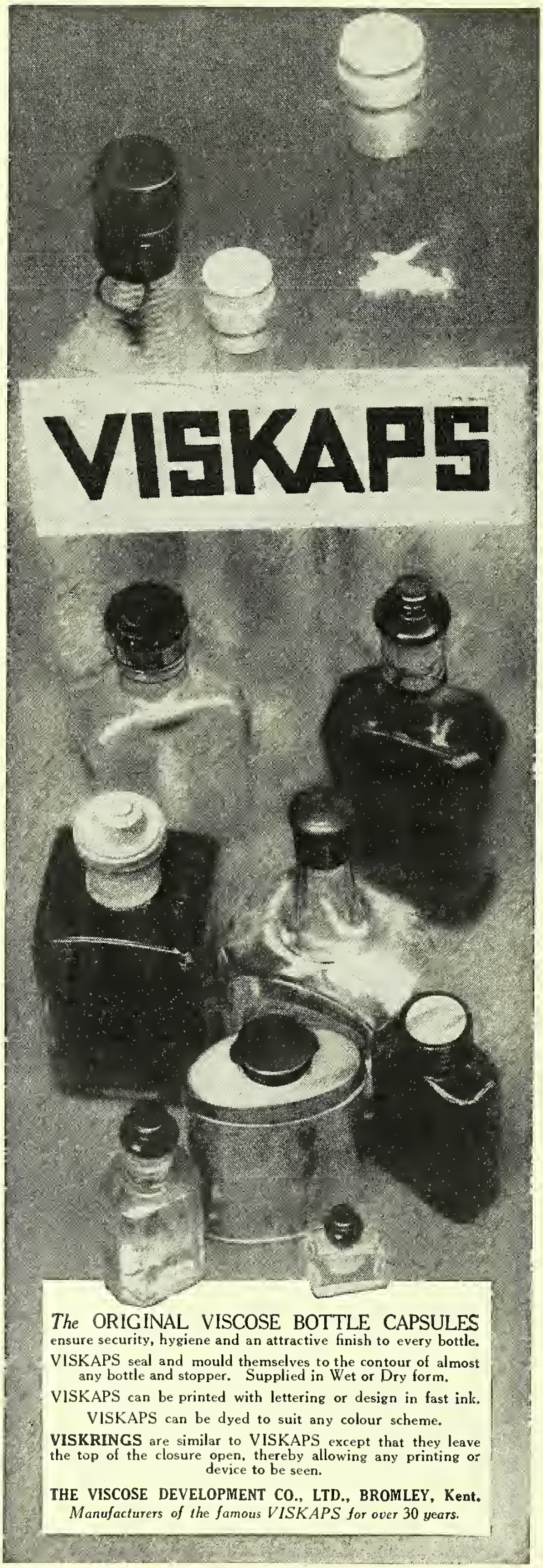
Registered Trade Mark

MADE IN ENGLAND

the toothbrush that is consistently advertised to the public throughout the year

Order from your usual wholesaler or from

THE BRITISH XYLONITE COMPANY LIMITED · HALE END · LONDON · E.4



VISKAPS

The ORIGINAL VISCOSE BOTTLE CAPSULES ensure security, hygiene and an attractive finish to every bottle.

VISKAPS seal and mould themselves to the contour of almost any bottle and stopper. Supplied in Wet or Dry form.

VISKAPS can be printed with lettering or design in fast ink.

VISKAPS can be dyed to suit any colour scheme.

VISKRINGS are similar to VISKAPS except that they leave the top of the closure open, thereby allowing any printing or device to be seen.

THE VISCOSE DEVELOPMENT CO., LTD., BROMLEY, Kent.
Manufacturers of the famous VISKAPS for over 30 years.

STEADILY GROWING

The popularity of Rowland's Macassar Oil as a Hair Tonic and Dressing, is reflected in the steady increase in sales during the past year. Widely known and well advertised, it attracts a high class and profitable trade.

FAMOUS SINCE 1793

A. ROWLAND & SONS, LTD.
22 LAYSTALL ST., ROSEBERY AVE., E.C.1

SWIFT
and SURE

will be the progress of your Photographic Department if you entrust your developing and printing and enlarging to

The SWIFTSURE
Photographic Works Ltd.
SUTTON COLDFIELD
WARWICKSHIRE

●

Standard prices (Central for Everywhere)

Standard discounts by post or road

HAVE YOU ORDERED YOUR STOCK OF

PAPIER POUDRÉ?

Don't forget that there is $7\frac{1}{2}\%$ discount on orders for 6 dozen and a Blue and Silver Revolving Bookcase free for your counter

From all Wholesalers or direct from :— PAPIER POUDRÉ LTD., 46 Baker Street, LONDON, W.1

'Ceraton'

A DELIGHTFUL TOILET CREAM
UNDER YOUR OWN NAME

IN BULK OR
READY PACKED
IN 1½ OZ. & 8 OZ. POTS

"Ceraton" is a new "all-purposes" non-greasy, antiseptic toilet cream made from an entirely new base. It is supplied either in bulk (Perfumed or unperfumed) for re-packing, or in dainty glass jars, 1½ oz. or 8 oz., under "Ceraton" label or blank for chemist's own name. Prices and sample jar free on request.

TRAGASOL PRODUCTS Ltd., HOOTON, WIRRAL, Cheshire

"Yvonne" ROUGE LIPSTICK POWDER

the LEADING 6d. LINES
and the BIGGEST SELLERS

Splendid Show material available.
Write to-day for Samples and Prices.

W. J YVONNE et CIE. Ltd. 8a. Lord Street LIVERPOOL. (Also London & Paris)

REID'S

Bamyl

REGD.

PINE TAR SHAVING SOAP AND TOILET PRODUCTS

Plain and Mentholated

REID'S
"Bamyl" REGD
"PINE TAR" SHAVING SOAP EST 1868
ANTISEPTIC PROTECTIVE SOOTHING
MADE IN SCOTLAND
A SHAVING SOAP

They are different — try them

Profit Margin $33\frac{1}{3}\%$

BAMYL

		SELLING PRICE
Shaving Stick (Bakelite container)		1/-
Shaving Stick (Cardboard refill)		9d.
Shaving Stick "JUNIOR"		6d.
Shaving Cream	tube	1/-
Toilet Skin Soap	tablet	6d.
Liquid Shampoo (Non-Spirit)	bottle	1/-

Display Cases, Showcards, Pamphlets, Attractive Samples for distribution

SOLE MAKERS ESTAB. 1868

Thomas Reid & Sons Ltd., Glasgow

A NEW SALES ATTRACTION

THE NEW

'DAWN'

RAVEL-PROOF (Regd.)
FACE CLOTH
DISPLAY OUTER

Dawn knitted face cloths
6d EACH
MADE BY PATENT MACHINE RAVEL-PROOF
SOOTHE THE SKIN AND AID THE COMPLEXION

"Dawn" Ravel-proof face cloths are of course in a class by themselves. Your customers appreciate their soft and durable qualities, and know they retain their shape and never get slimy. They are available in a variety of delicate pastel shades which have an immediate feminine appeal. The new display outer, holding one dozen, is most attractive and will definitely increase your sales of this popular line. Colourful, yet neat, it takes up little room on your counter, and ensures those EXTRA sales which mean so much.

They retail at 6d. and carry a good profit. Your usual wholesaler can supply you. Order a trial supply with your next order.

Jacquesil Fabrics Ltd

105/107 Princess St., MANCHESTER

London Agent: G. H. Bolton, 28 Falcon Sq., Aldersgate St., E.C.1

A bigger SUCCESS than ever . . . this Summer

Nurona in the DAILY MAIL to-day (Friday) and the SUNDAY DISPATCH

Retail Price

1/-

per bottle
P.A.T.A.

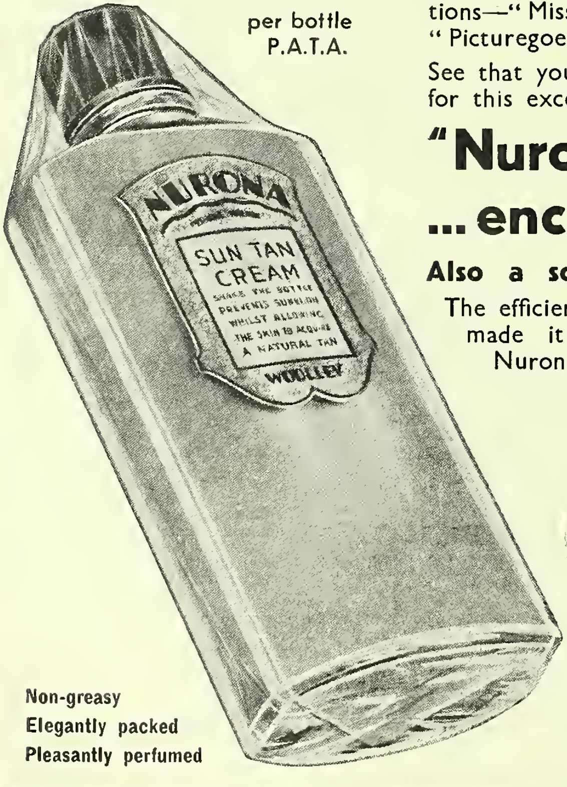
Now begins the heaviest advertising for Nurona. Millions of prospective purchasers will see the announcements in "The Daily Mail" and "Sunday Dispatch" this week-end, in the largest provincial newspapers and the leading women's publications—"Miss Modern," "Woman & Beauty," "Film Pictorial," "Picturegoer," "Passing Show," etc. etc.

See that you have ample stocks to meet the growing demand for this excellent and effective product.

"Nurona" prevents Sunburn ...encourages rapid Tanning

Also a soothing application after over-exposure

The efficient qualities of NURONA as a sun-tan cream have made it amazingly popular with old and young alike. Nurona offers quick, easy sales and generous profit.



NURONA

SUN TAN CREAM

Don't miss your share of the trade Nurona advertising is creating. Anticipate the holiday season with a generous stock of NURONA—and keep it well displayed. Write to-day for Bonus Terms and attractive display material.

Non-greasy
Elegantly packed
Pleasantly perfumed

JAMES WOOLLEY SONS & CO. LTD., Victoria Bridge, MANCHESTER

WN7

ALWAYS REFRESHING

The VINOLIA Policy is as refreshing as their products are famous

New Packs with a fresh appeal, Show Material which suggests the freshness of a spring morning and Press Advertisements which tell a sincere story, all combine to rouse afresh public interest in these packs for which there is already an increasing demand.

Show VINOLIA during the summer months! It will pay you to stock more VINOLIA and to *stress the refreshing note.*

THESE ARE ALL BEING REGULARLY ADVERTISED IN THE NATIONAL AND PROVINCIAL PAPERS.

VINOLIA IS THE MOST REFRESHING SOAP IN THE WORLD

SHOW AND SELL MORE VINOLIA *REFRESHING* PRODUCTS AND REFRESH YOURSELF WITH MORE VINOLIA PROFITS!

VINOLIA Co., Ltd., BEBINGTON, CHESHIRE.

ARE YOU PUSHING THESE SPLENDID NEW VINOLIA PACKS?

VT 130-29-100

NEW!

VINOLIA SOAP

More refreshing and more soothing than ever

VINOLIA TALCUM

Cooling and soothing for babies and people of all ages

VINOLIA SHAVING STICK

An improved Shaving Stick in a triple-purpose container

Write for Special Offers

"An asset to the man who foots the bill"

In this printing business of ours we like to see all our efforts a little above the ordinary, for there is a particular pleasure and satisfaction in the effort which takes a man out of convention and out of himself. When a man takes his coat off to a job and tackles it with enthusiasm you know he is going to be happy, and the result is the kind of printing which is a credit to all concerned, and a distinct asset to the man who has to foot the bill. It should not be necessary, of course, to ask if a man likes his work—the spirit of unbounded enthusiasm ought to show it. A man should be so much in love with his job that he finds his greatest delight in it. He will love it for its own sake. He will see no difference between the pleasure he gets out of his job and that which he gets out of his spare hours. There can be no thrill or joy of achievement in work which has been carried out in a half-hearted and careless manner, and the man who has not discovered the joy of putting his heart and soul into every job he undertakes to do does not know the first principle of progress and success. We make a point of always trying to inspire the members of our own staff with the spirit of service and true craftsmanship. They love their job and they like to do it as well as they possibly can. They also love getting to know more and more about it, and their enthusiasm and determination to produce printing which will speak well of the customer and interest people in what he has to sell is expressed and visible in every transaction. That is probably one of the reasons why so many people like to tell us what jolly good printing we are producing for them.

Ideas and rough suggestions are prepared free and without any obligation

THOMAS **WAIDE** & SONS LTD

KIRKSTALL HILL LEEDS 5

Easy-Quick Profits, Rapid Repeats

Because Everybody needs Beaucaire and Thousands use it every day

BEAUCAIRE REMOVES STAINS

Grease, Tar, Oil, Varnish, etc., from Silks, Woollens, Dresses, Hats, Furs (even ermine and white Fox), Gloves, Ties, etc. Non-inflammable, leaves no odour, entirely British. Guaranteed not to injure delicate Fabrics or dyes of ordinary fastness.

BEAUCAIRE RETAILS AT 1/-, 2/- & 5/- PER BOTTLE
YOU PAY 8/-, 16/-, 40/-, PER DOZEN

YOUR PROFIT 33⅓%

Order a Sample Lot from your Wholesaler. The best Wholesale Chemists between Inverness and Plymouth carry good stocks.

NATIONAL ADVERTISING STARTS JULY

with full pages and smaller pages in National Magazines

FREE

- ATTRACTIVE SHOWCARDS
- WINDOW BILLS
- ADVERTISING LEAFLETS & POSTCARDS

TAKE ADVANTAGE

of the Summer Trade and win the appreciation of your Customers. Advertising matter and also particulars free on request. Sole Manufacturers :

BEAUCAIRE LABORATORIES
35 VINE STREET, LONDON, E.C.3

PRECIPITATED CHALK

LIGHTEST—MEDIUM—DENSE.
And All Other Grades To Suit Every Purpose.
Prepared Chalk B.P. and Powdered Talc.

'Phone: Mansion House 7300. Tel. Add.: "Levermore, Phone, London."
A. LEVERMORE & CO. LTD.
110 CANNON STREET, LONDON, E.C.4.
ABC Codes. 6th Edition.

GUMS TRAGACANTH AND ARABIC
As Imported or Finely Powdered
ALL GRADES
FREDK. FINK & CO., 10 & 11 Mincing Lane, London, E.C.3
Telephone: Mansion House 5094

INCREASE YOUR DEVELOPING AND PRINTING SERVICE!
MAKE USE OF OUR REALLY USEFUL SERIES OF D. & P. BOOKS. ALSO OUR PRINTED AIDS TO SELLING
INTERESTING RANGE OF SAMPLES POST FREE
BURALL BROS., WISBECH, Cambs.

FINEST PURE LOFOTEN
COD LIVER OIL
BRÖDR AARSÆTHER A/S AALESUND, NORWAY
Sole Agents for U.K. (excepting Scotland).
FREUDENTHEIL, SMITH & CO.,
21 MINCING LANE, LONDON, E.C.3. Established 1826
Tel. Add.: "Freudenruf." *Tel. No.:* Mansion House 6600

R. M. SCOTT'S
PATENT MALT
CHARCOAL BISCUITS
MADE WITH STONE GROUND WHEATMEAL AND PURE VEGETABLE CHARCOAL
SAMPLES SENT ON REQUEST FROM MAKERS
R. M. SCOTT (IPSWICH) LTD., TURRET LANE, IPSWICH

Now- A PEROXIDE THAT KEEPS ITS STRENGTH
● A specially stabilised 20-volume Peroxide of Hydrogen. 2/- per bottle.
INEXIDE
Manufactured by RAPIDOL LIMITED. 32 DOVER STREET. LONDON. W.1.

THOMAS & LINTON, LTD.
4 GRAY'S INN ROAD, LONDON, W.C.1
Telephone: Holborn 5518
Everhot Bags,
Canda Products, Iodine Lockets,
Ephedrol, Litesome Belts
Deliveries from London Stock

Eau de Cologne . . . Lavender Water
ALL TOILET PREPARATIONS
Low, Son & Haydon, Limited
5 GT. QUEEN ST., LONDON, W.C.2 COURT
TELEPHONE: HOLBORN 4007 EST. 1790 PERFUMERS

SHADEINE
FOR TINTING GREY HAIR
This popular article is largely advertised and stocked by all Wholesale Houses.

Trial size 8d., per doz.	6/-
1/4 size, per doz.	12/-
2/6 size, per doz.	24/-
3/9 size, per doz.	36/-

The SHADEINE Co., 49 Churchfield Road, Acton, W.3.

When considering your
D & P Service
consult
SHAWYER & BLAKE
6 CRICKLADE STREET, SWINDON, Wilts.

OPTICAL TUITION
FOR THE
S.M.C., B.O.A. and N.A.O. DIPLOMA Examinations
Particulars:—
C. A. SCURR, F.S.M.C., F.B.O.A., F.N.A.O., F.I.O., F.C.O., M.P.S.
50 HIGH STREET, BARNET, LONDON, N.

CONTRACEPTIVES
We have been supplying Contraceptives of all kinds now for over 30 years and our well-known Safeguard & Empire Brands are still as popular as ever. THESE FACTS SPEAK FOR THEMSELVES and prove the confidence we have secured which is the fundamental principle in selling these goods.
All our Brands are guaranteed to be of the finest manufacture.
Write for complete Price List and Samples.
BURGE, WARREN & RIDGLEY, LTD.
91-92 Great Saffron Hill, London, E.C.1

For Bright, Profitable Displays
THE NEW *Poppy* ELASTIC CORN STRAPS
A. de ST. DALMAS & CO. LTD. LEICESTER

Chemists' Fittings
When you want Shop Fittings it will pay you to send to
GEORGE COOK
The Chemists' Working Shopfitter,
27 Macclesfield Street, City Road, LONDON, E.C.1
40 years' experience *Phone:* Clerkenwell 5371 *Rough Sketches free*

HOW IS YOUR STOCK OF
ESTIVIN
HAY FEVER REMEDY?
SHOW CARD SUPPLIED FREE.
T. CHRISTY & CO. LTD., OLD SWAN LANE, E.C.4

CHILDREN'S TONIC

Display material will be sent with any trial order.

RED BONE MARROW
CHEMICAL FOOD
MALT EXTRACT

Potter & Clarke's Children's Tonic, prepared from Red Bone Marrow, Chemical Food and Malt Extract, provides you with the opportunity to create the greatest of goodwill with your customers. The body-building properties of this tonic are well known—your customers will want to buy.

CHILDREN'S TONIC.

Retail **6d.** 2½-oz. tobin. Price **4/-** doz. Gross lots **3/9** doz.
Retail **1/-** 6-oz. panel. Price **6/6** doz. Gross lots **6/-** doz.
Own name on 3-dozen lots.

POTTER & CLARKE, LIMITED,
Dept. C.T., 60, 62 & 64, Artillery Lane, London, E.I. Telephone: Bishopsgate 4761

A FINE SELLING OPPORTUNITY

POWERFUL CAMPAIGNS

wider markets—and profits from—

TWO NATIONAL FAVOURITES

NEW MODERN CONTAINER

Stick suspended in this handsome new pack — for perfect "conditioning." Screw cap engages instantaneously on thread—quick and hygienic service. . . One campaign will sell the container; another campaign will sell the lubricating qualities, etc., which have made the stick itself a world-wide favourite.

ENLARGED TABLET—22%

Another favourite. Now capturing still wider markets and more devotees with enlarged values—carried to the public by a penetrating campaign. The Queen of Beauty Soaps—now nearly a quarter as big again!—brought to *your* public by a wide and insistent Press campaign: herbal tonic; cleansing.

These new features of the two big Erasmic lines will be heavily advertised throughout the year—through twenty-seven national publications!

It is important trade news! It will reach many millions of newspaper and magazine readers! It will create added turnover and new custom! Take advantage of this widening out of these two markets. Link up with it. Overhaul your stocks. Make sure of the beautiful and compelling display material now at your service. This news will bring you safe — and regular — profits!

STOCK AND DISPLAY ERASMIC

ERC 23-29-100

Purchased with confidence

'HAZELINE' CREAM is increasingly used as a preliminary to cruising and seaside holidays. As a skin toner and to safeguard against excessive drying and roughening, it remains supreme.

"'HAZELINE' SNOW" is universal favourite amongst women with whom quality is the first essential.

Suggest it as a soothing and refreshing application after exposure to sun, wind or sea-air.

'HAZELINE'
(Trade Mark)
CREAM

London Prices to the Trade (Subject)

Glass jars	**15/-** per doz.
Collapsible tubes **7/6** and	**15/-** ,, ,,
Jars containing 1 lb. ...	**105/-** ,, ,,

"'HAZELINE'
(Trade Mark)
SNOW"

London Prices to the Trade (Subject)

Glass jars	**15/-** per doz.
Collapsible tubes ...	**5/5** ,, ,,

Both products are purchased with confidence.
Send for sales-promotion material, free on request.

BURROUGHS WELLCOME & CO., LONDON

G 1879

COPYRIGHT

SUPREME QUALITY IS BURROUGHS WELLCOME QUALITY

Are you handing this Distinctive Saline to your Customers?

The advantages of **SALINAX** are:

1. The sale is restricted to pharmacists.

2. It is a product of the highest grade.

Experience proves that Salinax, once introduced will retain customers.

3. The profit is good. Until further notice we are continuing our Special Bonus offer of

Thirteen Bottles to the dozen for customers willing to display and push the product.

P.A.T.A. PRICES (Home Trade).

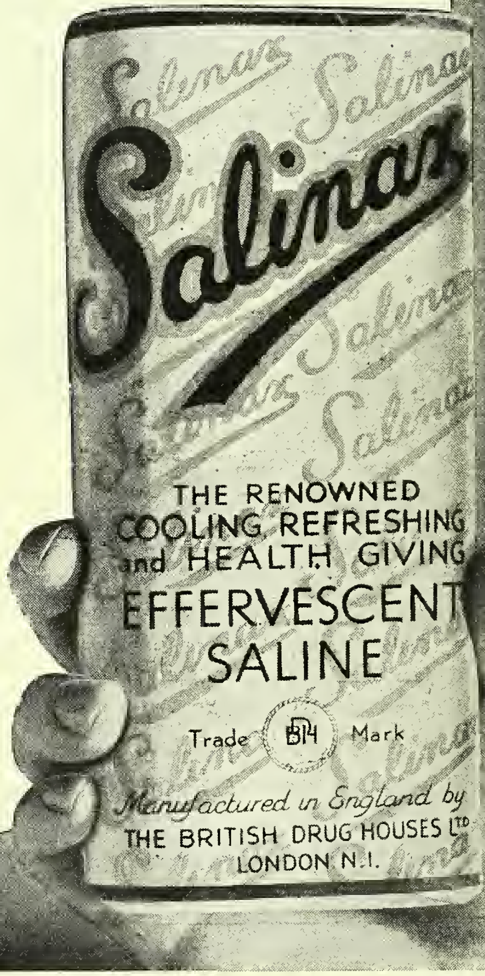
Retail 1/3 each. Wholesale 10/- dozen
(13 to the dozen)

Retail 2/3 each. Wholesale 18/- dozen
(13 to the dozen)

Special prices for quantities.

4. Modern show - material is available, including new show-stand and booklets. A supply will be sent with every order.

A B.D.H. PRODUCT



T.G.S

THE CHEMIST AND DRUGGIST

A Weekly Journal of Pharmacy, the Drug, Chemical and Allied Trades

The official organ of The Pharmaceutical Society of Ireland,
The Pharmaceutical Society of Northern Ireland,
The Chemists' and Druggists' Society of Ireland, and of
other Chemists' Societies in Overseas Dominions

PUBLISHED AT
28 ESSEX STREET, STRAND, LONDON, W.C.2

Telegrams : "Chemicus, Estrand, London" *Telephone : Central* 6565 (8 *lines*)

BRANCH OFFICES
4 CANNON STREET, MANCHESTER (TEL.: BLACKFRIARS 3052)
54 FOSTER'S BUILDINGS, HIGH STREET, SHEFFIELD (TEL.: 22458)
19 WATERLOO STREET, GLASGOW (TEL.: CENTRAL 2329)
372 FLINDERS LANE, MELBOURNE, AUSTRALIA
55a SHORTLAND STREET, AUCKLAND, NEW ZEALAND
155 AVENUE DE WAGRAM, PARIS, XVII^{e} (TEL.: ETOILE 19-79)
PLANTAGE FRANSCHELAAN 32 AMSTERDAM-C, HOLLAND

CONTENTS

VOL. 123. NO. 2891 JULY 6. 1935

PAGE
Births ... 29
BRITISH PHARMACEUTICAL CONFERENCE:
  Science Section ... 9
  Delegates' Meetings... 27, 33
  Social Side ... 37
  Who Were There ... 41
British Chemicals in Argentina ... 48
Business Changes ... 8
C. & D. Retail Price List 29
Chemistry Research Board 47
Correspondence:—
  Letters ... 53
  Miscellaneous Inquiries... 54
  Subscribers' Symposium... 53
Deaths ... 29
Editorial Articles:—
  Belfast Conference ... 31
  Last Week's Achievement 31
  Dangerous Diet? ... 32
  Weights and Measures Legislation ... 32
Forty Days ... 44
Gazette ... 8
Hospital Poisons ... 45
Information Department 30
Insurance Dispensing ... 46
Irish Notes ... 5
Legal Reports ... 7
Marriages ... 29
New Companies and Company News ... 7
News of the Week ... 1
Personalities ... 29
Pharmacist's Microscope ... 44
Retrospect ... 54
Pharmaceutical Society of Great Britain:—
  Council Meeting ... 43
Scottish Notes ... 4
Stock Exchange Prices ... 8
Topical Reflections ... 6
Trade Marks ... 29
Trade Notes ... 28
Trade Report ... 49
"Ultra Sounds" ... 45
Wills ... 47

News of the Week

Parcels by Rail—Reduced Rates

The Great Western, London Midland and Scottish, London and North Eastern, and Southern Railways announce that simplified scales of owner's risk charges have been introduced for parcels up to 15 lb. in weight conveyed by passenger train. The new scales have been reduced to two gradations, one being in respect of distances up to 30 miles and the other in respect of all distances over 30 miles. The new scales will apply between all stations in Great Britain, including the Channel Islands and the Isle of Man, where through bookings are in operation. The following are typical examples of the old and new rates:—

Station	Old Rates		New Rates	
	7 lb.	15 lb.	7 lb.	15 lb.
	s. d.	s. d.	s. d.	s. d.
London with—				
Luton	0 8	0 10	0 7	0 9
Bedford	0 10	1 2	0 9	1 0
Oxford	0 10	1 3	0 9	1 0
Birmingham	0 11	1 4	0 9	1 0
Bristol	0 11	1 4	0 9	1 0
Manchester	0 11	1 5	0 9	1 0
Plymouth	0 11	1 6	0 9	1 0
Glasgow	0 11	1 6	0 9	1 0
Edinburgh	0 11	1 6	0 9	1 0
Manchester with—				
Liverpool	0 8	0 10	0 7	0 9
Bradford	0 10	1 2	0 9	1 0
Newcastle	0 11	1 4	0 9	1 0
Southampton	0 11	1 6	0 9	1 0
Middlesbrough ...	0 11	1 4	0 9	1 0

Amended Duty on Preserved Citrus Fruit and Juices

Under the Additional Import Duties (No. 20) Order, 1935, dated June 25, the rates of duty charged on imports of the products mentioned were amended and charged as follows, on and from June 27, 1935.

Class of Goods	Additional Duty plus General *ad valorem* Duty
Citrus fruit preserved by chemicals or artificial heat and citrus fruit (other than fresh fruit) preserved by artificial cold; but not including citrus fruit preserved in sugar.	15 per cent.
Citrus fruit juices:—	
(i) Unsweetened	15 per cent.
(ii) Sweetened	Such a rate of duty as will, with the duty chargeable under any enactment other than the Import Duties Act, 1932, and the amount of the general *ad valorem* duty, if any, chargeable under Section 8 of that Act, exceed the duty chargeable under the said other enactment by an amount equal to 15 per cent. of the value of the goods.

Import Duties Advisory Committee Notices

The Import Duties Advisory Committee give notice of applications for increases in the import duties on the following products:—

VEGETABLE OILS AND OIL SEED CAKE AND MEAL;
CONDENSED MILK, MILK POWDER AND OTHER PRESERVED MILK; BUTTERMILK POWDER AND WHEY POWDER.

Any representations which interested parties may desire to make in regard to these applications should be addressed in writing to the Secretary, Import Duties Advisory Committee, Caxton House (West Block), Tothill Street, Westminster, London, S.W.1, not later than July 15, 1935.

The Committee announce that they have decided not to make any recommendation in respect of the application previously advertised for the addition to the Free List of Magnesium Sulphate.

Outings

Birkenhead chemists held their annual summer outing to Blackpool on June 20, when a party of over thirty spent an enjoyable afternoon on the beach and in the pleasure grounds. The party left Birkenhead at 2.0 by coach and, via the new Mersey Tunnel, arrived at Blackpool just before 5.0. At the Clifton Hotel high tea was served and photographs of the party taken afterwards.

The staff of W. Blythe & Co., Church, and John Riley & Sons, Hapton, chemical manufacturers, had their annual outing to Blackpool on June 22. An outstanding feature was the presentation of gold watches to eleven employees with forty or more years' service. Among those present were Mr. J. M. Tucker, K.C., vice-chairman, and Mr. W. Collison, managing director.

The employees of National Drug Industries, Ltd., London, E.1, held their annual outing to Hastings on June 22. In the absence of Mr. W. J. Beardsley (chairman and managing director), who was attending the British Pharamaceutical Conference meeting in Belfast, luncheon was presided over by Mr. T. G. Don (secretary). Mr. A. McDonald proposed "The Company," to which Mr. T. G. Don replied. The toast of "The Representatives and Staff" was proposed by Mr. F. Bolton, and acknowledged by Mr. A. Weston (representative) and Mr. A. Scrase (staff).

Nearly 100 of the senior members of the staff of C. J. Hewlett & Son, Ltd., London, E.C.2, went by train to Hastings on June 29. At 1 o'clock an excellent dinner was served at the Albany Hotel, Mr. Vivian C. Hewlett, Ph.C., F.C.S., in the chair. The toast of "The Firm" was proposed by Mr. F. Betts in a witty speech, with topical allusions which elicited much applause. The chairman, replying in the same vein, described the speech as lightly compressed, well-rounded and cleverly coated as might be expected from the foreman of the tablet department. He also commented on the satisfactory progress of the business, particularly in export (which was more imperial than international). In the afternoon motor coach drives were arranged for a circular trip, returning for tea at the Albany. London was reached by 9.30 p.m., and it was unanimously agreed that a most enjoyable day had resulted, thanks to the perfect arrangements of the committee.

Members of the West Kent Branch of the Pharmaceutical Society availed themselves of the day upon which the gardens at Knole were thrown open to the public, for their annual outing. A well-filled coach and several cars left Bromley Market place at 2.15, picking up Mr. E. G. Price and his party at Chislehurst and proceeding thence by way of Chelsfield and Polhill to Sevenoaks. Knole Park was looking its best, and numerous deer were observed. Later, during tea at Sevenoaks, the president (Mr. Allan Bone) and his wife arrived from their caravan which is "parked" in readiness for summer holidays. A splendid outing concluded with a drive through the pretty villages of Ide Hill, Brasted, Westerham and Limpsfield, up Titsey Hill to Warlingham and home.

"West Kents" at Knole House

The annual social outing of the Warwickshire Branch of the Pharmaceutical Society took place on June 27. Coventry and Nuneaton members met the Leamington section and proceeded by motor vehicle to Tenbury Wells, Worcestershire, via Droitwich, Ombersley, Holt Fleet and Whitley. Tea was taken at the Swan Hotel, Tenbury, where the party was met by Mr. and Mrs. Mann of Birmingham. During tea time a message of congratulation and wishes for future happiness was telegraphed to Miss Mary Welton, Coventry, on her wedding. The return journey was via Worcester, Alcester and Stratford. The arrangements for the trip were carried out by Mr. Wooddisse, Kenilworth.

Members of the Blackburn and District Chemists' Association had their annual excursion to North Wales, accompanied by Mr. Horace Slater (president) and Mr. Fred Law (secretary), on June 20. Mist and drizzle interfered with the 150-mile motor ride to Bettws-y-Coed and Swallow Falls. At Llandudno, where the weather was fine, there were boating, swimming, putting and climbing of the Great Orme. There was one little diversion while one party was on the "briny." In some way a gentleman's mackintosh caught fire and this ignited his umbrella. However, the flames were quickly subdued.

Blackburn Chemists at Llandudno

Inquest

At Accrington, on June 26, an inquest was held on the body of Norman Welsby, Walkden Road, Worsley, who was found dead. Police evidence showed that in his clothing were two packets of corrosive sublimate labelled "Poison." Mr. George H. Cheetham, chemist and druggist, assistant to a chemist, said in December last six packets of corrosive sublimate were supplied to the firm employing Welsby. There were 4,000 medicinal doses in each packet. The verdict was "Suicide while not of sound mind."

Blackpool

The Blackpool Chemists' and Photographic Dealers' Golfing Society competed for the Kerfoot trophy at Fairhaven Golf Club, Ansdell, on June 26. E. F. Dowty was the winner with a score of 74. A. Barnes was second with 75. Other returns were:—

F. Tattersall	76	E. Haworth	81
W. Ellis	77	J. Capstack	82
R. P. Moorhouse	77	F. Rickman	82
W. Wolfe	80	S. Smith	83

Rain caused abandonment of a match between a Blackpool chemists' eleven and a team of doctors at Blackpool cricket ground on June 19. The event, which was well patronised, was in aid of the Mayor of Blackpool's Victoria Hospital Fund. Batting first, the chemists opened disastrously, two wickets being down for only one run and three for seven. F. Bartlett and T. A. Durkin retrieved the position, however, Bartlett soon knocking up 31. D. Cooke and R. S. Crozier followed this up with some big hitting, the latter being not out at 52. The innings had barely been declared closed at 142 for 7 when heavy rain began to fall. Mr. T. A. Durkin captained the team in place of Mr. J. W. Huddart (injured). Scores:—L. Brookes, run out, 1; A. Sidebottom, b. Dr. H. F. Overend, 5; H. Platt, b. Dr. J. A. Longworth, 0; R. Riley, b. Dr. J. A. Longworth, 6; F. Bartlett, b. Dr. J. A. Longworth, 31; N. Earnshaw, c. sub., b. Overend, 4; T. A. Durkin, b. Dr. J. A. Longworth, 7; D. Cooke, not out, 22; R. S. Crozier, not out, 52; extras, 14; total, 142 for 7. R. Aspden and H. Hall (president) did not bat. Dr. J. A. Longworth was the most successful of the five bowlers, returning final figures of three wickets for 29 runs.

Bournemouth

The above Display was made by Mr. Norman K. Phillips, Chemist and Druggist, The Moordown Pharmacy, Bournemouth, in connection with a Special Offer

Liverpool

Mr. L. W. Mussell asks us to express his thanks to those who voted for him at the recent election for the Liverpool Pharmaceutical Committee.

Photographic dealers on Merseyside have been faced with a new challenge to their business, as recently a large stores announced the sale of 2¼ in. by 3¼ in. films at 7½d. per spool of eight exposures.

A hanging electric sign over the premises of Mr. W. Burgess, Whitechapel, caught fire on July 1, owing, it is thought, to a short circuit. The flames were soon extinguished and little damage resulted.

London

At Westminster Police Court, on June 24, Harold Yates (48), Raphael Street, S.W.7, pleaded "Guilty" to stealing goods from Harrods' and Selfridge's shops to the value of £176 10s. He was fined £25, with £10 10s. costs.

In Bow County Court, on June 27, Burgoyne, Burbidges & Co., Ltd., manufacturing chemists, sued Averys (Brighton), Ltd., chemists, to recover the sum of £5 5s. for goods supplied. A defence had been put in to the effect that the defendants did not owe any account to the plaintiffs. They also asserted that Averys (Brighton), Ltd., no longer existed. When the case was called Mr. Ruoff, for the plaintiffs, said the account had since been paid in full. Judge Thompson granted the costs.

Sheffield

There has been no contest for the Pharmaceutical Committee election. The Committee includes one new member, Mr. Reginald William Fairest, chemist and druggist, Marcliffe Road.

Burdall's, Ltd., have announced that after the fire which damaged their Gibraltar Street premises on June 12 (*C. & D.*, June 22, p. 737), all their routine was re-established in the course of a few days, and full wages are being paid to every employee.

A meeting of the local branch of the Association of Pharmaceutical Employees took place on June 25 at the Church House. The speakers were Mr. E. Teesdale, M.P.S., Mr. J. E. Payne, divisional officer, with Mr. R. A. Barnett, Sheffield organising secretary, in the chair. The chairman reported continued progress in the affairs of the new Association, and said large numbers of inquiries had been received from outlying districts with respect to membership. Arrangements were being made to interview these persons. Mr. Teesdale then addressed the meeting, and pointed out the need for such an Association if it were to deal with the many problems affecting the employee pharmacist, qualified and unqualified. He further enlightened the meeting on the activity in the Manchester area, and announced that sections had been formed at Newcastle, Leeds, and Hull, and others were in the course of formation. After discussion, new members were enrolled. Mr. R. A. Barnett, the organising secretary, outlined further details with respect to future organisation. The general secretary of the Association is Mr. W. Atkinson, M.P.S., 301 Wandsworth Bridge Road, Fulham, London, S.W.6.

Swansea

Members of the West Glamorgan Branch of the Pharmaceutical Society held their gold competition at Swansea Bay Golf Club on June 27. The results were as follows:—

" Rolando " cup (chemists and registered students only)

(1)	H. W. Jenkins	100—24=76	(Rhondda)
(2)	I. B. Jones	92—16=76	(Skewen)

A decision could not be reached on the first nine holes, so the committee decided they should play the best of three holes.

(3)	D. Richards	89—10=79	(Swansea)
(4)	J. M. Lloyd	92—12=80	(Carmarthen)
(5)	H. Jenkins	92—12=80	(Treherbert)
(6)	H. R. Davies	101—20=81	(Clydach)
(7)	J. Murray	96—12=84	(Cardiff)
(8)	T. J. Morgan	98—13=85	(Pontardawe)
(9)	C. A. Kent	101—15=86	(Swansea)

Open competition—

(1)	J. C. Park	82—9=73
(2)	S. Earle	79—6=73
(3)	W. Leyshon David ...	81—6=75

Miscellaneous

Wembley Chemists' Association are holding a tennis tournament at British Oxygen Co.'s Sports Ground, Barnhill Road, Wembley Park, at 2 p.m., on July 7.

Poison-licence application.—An application for a licence under Section 2 of the Poisons and Pharmacy Act, 1908, has been made to the Hertfordshire County Council.

Burglary.—The premises of Timothy Whites & Taylors, Ltd., Sandgate Road, Folkestone, were broken into on June 14. Cameras, photographic films and other articles valued at over £100 were stolen. A sack containing numerous articles was left behind.

Parcel post.—The new rates for the conveyance of parcels by parcel post, which came into force on July 1, are 6d. up to 3 lb., increasing by 1d. per lb. up to 8 lb. Higher weights up to 15 lb. (in place of the maximum of 11 lb. as at present) are charged 1s.

Visit to works.—Members and friends of the Thames Valley District Pharmacists' Association visited the works of Parke, Davis & Co., Hounslow, on June 19. Mr. P. Cathcart welcomed the party on behalf of the firm; Mr. C. J. Palmer (president) replied.

British Industries Fair, 1936.—The Department of Overseas Trade announces that within ten days of the issue of application forms for space in the British Industries Fair next February, 309 manufacturers have applied for space, compared with 241 applications at the corresponding date a year ago.

Bisulphide of Carbon (Conveyance) Regulations.—The Home Secretary has issued the Bisulphide of Carbon (Conveyance) Regulations, 1935, dated June 19 (Stationery Office, 2d.). The Regulations, twenty-seven in number, are followed by two Schedules, the first dealing with iron or steel containers and the second with mechanically driven road tank wagons.

Vinegar cases.—At Newport, Shropshire, recently, Ernest Reuben Jones, Marsh Road, was fined £5, including costs, for having sold vinegar certified by Mr. Harold Lowe, public analyst, to contain only 2.6 per cent. of acetic acid.—At Poole, recently, Harold W. Cox and Frederick J. Hall were convicted "without penalty" in respect of sales of vinegar slightly deficient in acetic acid.

Fires.—The following outbreaks of fire have been recorded since our last report. There was an outbreak of fire recently at the pharmacy of Mr. C. Stonelake, chemist and druggist, St. Peter Port, Guernsey. The damage was not of an extensive nature.—A fire broke out recently at the premises occupied by Mr. R. Bartle, chemist and druggist, Newcastle-upon-Tyne. A quantity of the stock was damaged.

Anthrax Committee.—The Home Secretary has reconstituted the Advisory Committee in connection with the anthrax disinfection scheme with an enlarged membership and with the following terms of reference:—To advise the Secretary of State upon questions arising in connection with the practical administration of the Orders-in-Council of March 9, 1921, and February 21, 1935, under the Anthrax Prevention Act, 1919.

Medicines and Surgical Appliances (Advertisement) Bill.—As we go to press we learn that a deputation was received by the Minister of Health (Sir Kingsley Wood) this forenoon (July 4) in connection with the Medicines and Surgical Appliances (Advertisement) Bill. The following associations were represented:—The Advertising Association, the Association of Municipal Corporations, the British Medical Association, the County Councils Association, the Institute of Incorporated Practitioners in Advertising, the Newspaper Society, the Periodical Trade Press and Weekly Newspaper Proprietors' Association, Ltd., the National Association of Insurance Committees, the Pharmaceutical Society of Great Britain, Proprietary Association of Great Britain, the Wholesale Drug Trade Association, the Wholesale Druggists Sundries and Proprietaries Association, the National Pharmaceutical Union, the Surgical Instrument Makers' Association Incorporated, the Society of Medical Officers of Health, the Parliamentary Medical Committee, the Parliamentary Committee on Food and Health. The deputation supported the Bill, and it is satisfactory to note that a great degree of unanimity was reached. The proceedings are at present confidential. We hope to deal with the subject next week.

Scottish Notes

North British Executive

A meeting of the Executive of the North British Branch was held at 36 York Place, Edinburgh, on June 19, Mr. David Harley in the chair. The chairman welcomed Dr. Todd and Messrs. Henry, Innes and Sinclair as new members of the Executive. Mr. F. W. M. Bennett (Arbroath) was elected chairman, and Mr. W. S. Culbert was elected vice-chairman. The Executive discussed a resolution from the Glasgow and South-Western Scottish Branch with reference to the unsatisfactory conditions under which the dispensing of medicines was carried on in open shops belonging to qualified medical practitioners. Mr. Duff said the City of Glasgow and the County of Lanark were the principal areas where this condition prevailed. Young persons possessing no pharmaceutical qualification were in charge who would dispense any doctor's prescription. It was felt that it should be possible to find some adequate remedy. He believed the majority of the medical profession would be in favour of dispensing being reserved to the pharmacist. The chairman asked for some definite plan. Mr. Guthrie said he hardly thought they should expect the Branch to submit a plan. The Branch was in the position of asking the Executive to see whether anything could be done. The Society as a whole was committed, and had been committed for some time, to a line of policy by which pharmacists would be recognised as the dispensers of medicines while the prescribing of medicines would be recognised as the function of the medical practitioner. While this was the aim, nothing was likely to be accomplished until they really took the matter up. Mr. Culbert said in his district all the doctors did dispensing, and had started a public medical service on the lines of the B.M.A. scheme without even consulting the local chemists. Mr. Dick said that the only practicable plan would be to secure legislation. After further discussion it was agreed to ascertain the position throughout Scotland and report.

Society of Chemical Industry

The Society of Chemical Industry opened its annual conference at Glasgow on July 1. The conference terminates on July 6. The president (Mr. Edwin Thompson, J.P., ex-Lord Mayor of Liverpool, delivered his presidential address on July 2 on "National Water Supplies." Mr. Thompson made reference to the early days of water analysis in Great Britain (pioneer of pure water), when "each village had its pet typhoid bug." Some conception of the daily consumption of water in Great Britain could, he said, be gleaned from the following figures, representing consumption per head per day in millions of gallons:—London 38, Liverpool 34, Huddersfield 60, Edinburgh 50, Glasgow 59. In America many cities used as much as 200 gallons per head per day. The medal of the Society was presented on July 4 to Dr. E. F. Armstrong, F.R.S., "for conspicuous services to chemistry."

Brevities

The new factory erected by the Scottish Milk Powder Co., Ltd., at Kirkcudbright, has commenced production. The factory is the first of its kind in Scotland.

Winners of the Ayrton Saunders Bowls Trophy and Prizes, 1935
Standing: M. Wallace (skip). *Sitting (left to right):* T. Hardie, F. B. Gray, A. W. Calder

Glasgow Pharmacy Club, Bowling Section:
Competitors for Cartwright Trophy, 1935

Mr. James Jack, Ph.C., a member of the Council of the Pharmaceutical Society, gave a speech as president of the Arbroath Rotary Club on June 27 on the report of the Poisons Board in regard to the Poisons List and Rules.

Mr. Harold Bride, a representative of Fassett & Johnson, Ltd., London, recently addressed the members of the Stirling Rotary Club on the loss of the "Titanic." Mr. Bride is the only surviving wireless operator of that ill-fated ship.

Many Scottish chemists, we are informed, are not inclined to observe the new Regulations regarding apprenticeship. One result is likely to be the increased buying of galenicals which cannot profitably be made under present conditions.

The competition of the Scottish Chemists' Bowling Association for the Gibbs trophy will take place on Stirling Bowling Green, Albert Place, Stirling, on July 10. Entries must be made, not later than July 8, to Mr. W. Seivwright, 22 Nithsdale Road, Glasgow, S.1.

Twenty-one members of the Edinburgh Chemists' Golf Club took part in a competition played over Dalmahoy No. 1 course on June 19. Results: 1 (tie), D. Barrie (11) and W. J. Rosie (11), 81; 3 (tie), J. Finlay (plus 1) and E. Randall (8), 83. Second class, J. A. Darroch (20), 88.

The "Weekly Scotsman" has lately published an interesting excerpt from the "Caledonian Mercury" of June 28, 1794, relating to the erection of Dundee Infirmary. In 1782 a dispensary for the poor had been established by "a considerable number of respectable gentlemen of the town and vicinity"; and the infirmary, it was hoped, would, in conjunction with the dispensary, "diffuse benign influence as widely as divine providence and human generosity shall afford opportunity and power."

At the University of Edinburgh graduation ceremonial on June 28, the degree of Ph.D. was conferred upon Mr. J. J. Blackie, Ph.C., A.I.C., of Duncan, Flockhart & Co., a former member of the Board of Examiners for Scotland, for a thesis on "The Alkaloids of the Genus Senecio"; and upon Miss Mary Jessie McDonald Noble, B.Sc., daughter of Mr. John Noble, M.P.S., Leith, for a thesis on "The Morphology and Cytology of *Typhula Trifolii Rostr.*" In the Department of Technical Chemistry, the degree of B.Sc. with honours was conferred upon Mr. Archibald Beveridge Currie, son of Archibald Currie, Ph.C., member of the North British Executive of the Pharmaceutical Society.

Dr. J. J. Blackie, Ph.C., A.I.C.

The Scottish Chambers of Commerce are preparing a journal to be issued in the autumn to help in developing trade between Scotland and the Empire.

Irish Notes

Dublin Photographic Dealers

The annual meeting of the Dublin Branch of the Photographic Dealers' Association was held at Jury's Hotel on June 24. Mr. John Smith, chairman, presided. After reviewing conditions during the year, the chairman said the Committee took the view that any applicant who was a pharmaceutical chemist in business for himself was entitled to be on the list of approved dealers. In one or two instances people that the Committee were opposed to got on the list in the Dublin area, but the Committee could not always have its way and it was short-sighted policy on the part of some members to have a grievance on that account. The membership in the Free State, the chairman continued, had remained constant during the year. Recently Mr. Brendan Smith had taken up the work of canvassing for new members and had met with considerable success. Another point which should not be lost sight of was the fact that the "Irish Press" was running a good photographic competition in collaboration with their Association. This competition was entirely confined to members of the P.D.A., and entries could only be sent in through them. During the course of his canvass some dealers expressed the view to Mr. Smith that as they were not able to maintain D. and P. prices they were not eligible for membership of the P.D.A. That was a mistaken view. Since the P.D.A. was not in a position to maintain prices, a man would be justified in joining in the hope that when the Branch got sufficiently strong it would be able to enforce prices satisfactory to all. The time had come for dealers to organise strongly to keep this business in the legitimate channels of the chemists' shops and opticians. Mr. P. A. Brady, submitting the accounts, stated that they had a paid up membership for 1934 of 208 members as compared with 210 members for 1933. Over the past two years' working they had a credit balance of £8 9s. 7d. which they did not collect from headquarters. Recently headquarters had sent them a sum of £10 towards the cost of Mr. Smith's expenses as organiser. On the motion of Mr. McLean Lee, seconded by Mr. Scott, the statement of accounts was adopted. The following were re-elected members of the *Committee*: The chairman and Messrs. Brady, Donnell, McLean Lee, Ryan and Thom. To fill three vacancies created by the resignations of Messrs. Maxwell, Meagher and Campbell, Mr. Scott proposed Mr. E. MacMahon, and this was seconded by Mr. Brady and carried unanimously. Mr. Donnell proposed M. Lyall Smith and Mr. Cahill, who were unanimously elected.

The chairman mentioned that the election of officers would be carried out at the first meeting of the Committee. Mr. Lyall Smith then moved that the Branch arrange for a series of talks for dealers and assistants, and in addition run suitable competitions. The best way to become an efficient photographic salesman was to become a photographer oneself. The competition could be held for the entire Free State and a small entry fee charged. Mr. MacMahon, Mr. McLean Lee, and other speakers endorsed Mr. Smith's proposals, and it was decided to refer them to the new Committee.

Irish Drug Association

Mr. P. A. Brady (vice-president) occupied the chair at the Committee meeting of the Irish Drug Association, held on July 1, when there was a good attendance. A representative of one of the leading cosmetic manufacturers in the Free State outlined the policy of his firm, which was to confine all their specialities to chemists and druggists. The Committee said they were glad to have a home manufacturer giving such a lead to others. The policy to be pursued by Burroughs Wellcome & Co. in their sales in the Free State was outlined by a representative of the firm. The attitude taken up was regarded as satisfactory. It was reported to the Committee that out of the seven manufacturers of baby foods to whom representations had been made by the Association, five had agreed to have their products distributed only to chemists and druggists. No replies had yet been received from the remaining two.

On the question of duty on adhesive plaster coming into the Free State, the secretary reported that the matter had been taken up with the Revenue Commissioners, but their reply was unsatisfactory. Under the Commissioners' ruling the cheaper packages of plaster would have to carry a heavier duty than the dearer ones. Other correspondence was dealt with. Reports were received from several of the local associations, in which these bodies gave their considered views on the replies received from manufacturers of veterinary proprietaries. The secretary reported that the copy for the 1936 Price List had been placed in the hands of the printers. The secretary of the North Leinster Association wrote asking to have Mr. Brendan Smith sent into their area. It was agreed to accede to the request. Mr. Smith stated that he had been recruiting members for the P.D.A. in the Dublin district.

Brevities

At the annual meeting of Ballymena Chamber of Commerce, Mr. Leslie J. Woodside, Ph.C., was elected a member of the Council.

For the July Licence examination of the Pharmaceutical Society of Ireland entries were received from thirty-seven candidates.

Mr. Thomas P. Toher, Ph.C., Stephen Street, Sligo, has been appointed a director of the Gaiety (Sligo), Ltd., a new cinema company.

At Lurgan, on June 28, John Weatherall (17) was committed for trial on a charge of "breaking and entering" the pharmacy of Mr. J. McD. Gorman, Market Street.

At Rasharkin Petty Sessions, recently, Norman L. Wallace was fined 5s., with costs, and 10s. for analyst's fee, for having sold vinegar not of the nature, substance or quality demanded.

Dr. Kenneth C. Bailey, recently appointed to the Chair of Physical Chemistry in Trinity College, Dublin, is the author of about thirty papers on chemical subjects. Dr. Bailey has been a lecturer in chemistry in Trinity College since 1921.

At Cookstown, co. Tyrone, on June 28, Bernard Conway, Broughderg, was prosecuted by the Customs and Excise authorities for selling methylated spirits without a licence, for selling it as a beverage, for failing to keep a register, and for selling the spirits to a boy under eighteen years of age. Mr. George Parkinson, Ph.C., Draperstown, stated that the defendant, who was a customer, purchased 48 pints of methylated spirits in small quantities between December 14, 1934, and March 9 last. Witness knew that he treated animals, and did not think this quantity unusual. Mr. Flack, a chemist's assistant in Cookstown, gave similar evidence. The magistrates imposed a penalty of £50, mitigated to £12 10s., with a recommendation for a further reduction to £7 10s. for selling the spirits without a licence. They dismissed the summons for selling as a beverage, but fined defendant £2 for failing to keep a register and £5 for selling to a boy under eighteen.

Referring editorially to the coming new poisons legislation in Great Britain and the position in the Free State, the "Irish Times" says: "A few days ago we commented, with approval, upon the closer supervision which in future will be brought to bear on the sale of poisons in the Free State. In Great Britain the Home Secretary has issued instructions which mean that an even stricter watch will be kept. . . . The need for great care, indeed, has been very obvious in Great Britain for some years past. One of the dangers against which a guard must be kept is that poisons, intended as medicine, may be incorrectly dispensed or used ignorantly for the wrong purpose; but there has been an even greater risk. Anybody who has followed the course of the murder trials that have taken place within the last decade will have noticed how often the victims have met their death through poisoning, and how easily these poisons can be obtained by criminals. Their task, however, will no longer be so easy. . . ."

Belfast

The Senate of Queen's University, Belfast, has appointed Mr. R. G. Baskett, M.Sc., to the chair of agricultural chemistry. Mr. Baskett has been a member of the University staff since 1924, and since 1928 has been lecturer in charge of the department.

Mr. J. R. Haslett (J. & J. Haslett, Ltd., North Street) has been appointed chairman of the Traffic Committee of the Belfast Chamber of Commerce. Mr. George Wilson (Jordan, Wilson & Alexander) has been appointed representative on the Council of the Wholesale Druggists' Section.

Dublin

In the Dublin District Court, recently, Charles Maher (25), dental mechanic, was fined £3 for practising dentistry without being registered.

Within the past few months five chemists in the Dublin area have taken out licences to sell tobacco and cigarettes. Other chemists in the Dublin district have gone into the wireless business, and one pharmacist in South Dublin had added a news agency to his side-lines.

Topical Reflections

By Xrayser

My Hearty Congratulations

to all concerned in the production of The Chemist and Druggist Annual Special Issue. I always look forward to this, knowing from past experience that one can find something in it right out of the beaten track of pharmacy, both in literary matter and illustrations; he must be difficult to please who is not satisfied, and more than satisfied, with the wealth of good things (not forgetting the advertisements) packed between the covers, reminiscent in their colours of the Silver Jubilee. Pride of place should, I think be given to the account of the Government Laboratory (p. 787). This is a fine bit of journalistic work, the accuracy of which is vouched for by no less an authority than the Government Chemist. Of almost equal importance is the article entitled "Science in the Detection of Crime" (p. 783); this is indeed a "scoop" on your part. The thanks not only of pharmacists but of other readers of the *C. & D.* will be accorded for the glimpses of these modern crime-detection laboratories; they show what a distance our detective and police forces have travelled since "The Adventures of Sherlock Holmes" was written. Of a different type is Miss Ping's article on "Medicine in Ancient Ireland" (p. 811); this is an unusual subject treated in an unusual manner, and is a valuable contribution to medical and pharmaceutical lore. I hear that the arrival of *C. & D.* Supplements in Belfast by aeroplane on the evening of June 27 was one of the outstanding events of the Conference: it "made history" in a very enjoyable way.

I Feel that another Paragraph

is called for in commenting upon the article "Eighteenth-century Domestic Medicine" (p. 799). I agree with the writer that there is need for a monograph on the domestic medicines in use in the eighteenth century; indeed, there should be a work of reference upon the development of the pharmaceutical art through that century. Something of the kind is all the more necessary in view of the forthcoming centenary of the founding of the Pharmaceutical Society in 1941; many of the seeds from which important movements developed were sown in the latter part of the eighteenth century. The writer of the article gives a good idea of the empiricism of the century, naturally more prevalent at the beginning than at the end. A study of the medicines in use about the year 1700 brings to light the fact that, in addition to many articles of materia medica still in use, there were loathsome and disgusting "remedies" as well. In "Religio Medici" we have a picture of the doctors of those days prescribing "with their eyes on the midnight horizon and cupping at the bidding of the stars." In addition to the five medical authors mentioned by your contributor, Linnæus the botanist, William Harvey the physician, and that brilliant trio Black, Priestley and Lavoisier were working along lines which, although not exactly pharmaceutical, had a profound influence upon pharmacy as it then was. You have certainly rendered a service to the pharmaceutical historian.

I Have Read

Dr. Crossley-Holland's address to the British Pharmaceutical Conference (p. 779) with mingled feelings of appreciation and doubt—appreciation of the ideal of the pharmacist assisting the medical man in many details of his daily work, doubt whether such an ideal can ever be realised. I quite agree with the chairman when he says that the doctor to-day is not thinking in terms of materia medica but in terms of pathology; I have said something of the kind in this column on many occasions. The demand for drugs is slowly declining: the doctor is trying other methods of treatment. The picture the speaker draws of the pharmacist examining urine, pus and other morbid products, carrying out blood counts, all for a small but remunerative fee, is an ingenious one. But how many doctors would allow the pharmacist to do the work, and what would they pay him? There are thousands of doctors who are doing the work of the chemist by dispensing medicines for their patients and supplying many kinds of sundries. If they will not give up this work, how can they be expected to hand over work which is peculiarly theirs and which they have always undertaken? The associations should preferably discuss the problem of dispensing for doctors before they get busy on the discussion of these other problems.

Legal Reports

A Drench that Went the Wrong Way.—At Ballymoney Quarter Sessions, on June 27, Mr. Hugh Henderson, farmer, Croagh, was awarded £15, with £1 1s. witnesses' expenses, against Mr. Samuel Morrison, Ph.C., Bushmills, in an action arising from the administration of a drench to a horse. The plaintiff said the animal was twelve years of age and a good worker. It suffered from worms. He asked for a powder, but Mr. Morrison said it was customary now to give drenches. The defendant gave the drench, and the animal knocked the bottle from his hand. The defendant said he would put it down in spite of the animal. It gave a cough and died later. Mr. John C. Cammock said he carried out a *post-mortem* examination. The animal died of pneumonia as a result of the drench going down the wrong way. Mr. Morrison said Henderson asked him to administer the drench, as he was not very good at it. Witness gave it as well as anyone could. Judge Bates said the animal died as a result of the drench.

Erasure from the Dentists Register.—In the Chancery Division of the High Court, London, on June 27, Mr. Justice Luxmoore delivered a reserved judgment, in which he laid down that the General Medical Council is not entitled to delegate to an executive committee its statutory powers of erasing the names of dentists from the Dentists Register. The matter arose on a summons taken out by the General Council of Medical Education and Registration of the United Kingdom, asking whether the Council had the right to delegate such powers. Mr. H. S. Preston, K.C. (since deceased), and Mr. D. C. Bartley originally appeared for the Council; Mr. F. Archer, K.C., and Mr. W. M. Hunt represented the Dental Board of the United Kingdom, the respondents to the summons. Mr. Preston explained that under the Dentists Act if a dentist was convicted of a felony or misdemeanour, or was guilty of infamous conduct in a professional sense, the Dental Board had to hold an inquiry and report to the General Medical Council, who were to determine whether the name of the dentist in question ought to be erased from the Register. The question at issue was a serious one, because the Council had thirty-nine members and was not a convenient body for the purpose and only met twice a year. Mr. Archer said the Dental Board had an objection to anyone other than the General Medical Council exercising the function of erasing a dentist's name, and objected to this being dealt with by a mere committee. Mr. Justice Luxmoore said the disciplinary powers conferred upon the General Council were of the utmost importance, and he was satisfied that no amendment to the original Dentists Act of 1878 should be construed as altering the provisions of that Act, which vested disciplinary powers in the General Council, unless the intention was expressed in implicit language. He was satisfied that the General Council could not act by a committee in exercising disciplinary powers over members of the dental profession, and had no power to delegate those functions.

New Companies
and Company News

P.C. means Private Company and R.O. Registered Office

Bennetts' (Chemists), Ltd. (P.C.).—Capital £2,000. Objects: To carry on the business of chemists and druggists, etc. R.O.: 19 Market Place, Stockport.

Eldu Products, Ltd. (P.C.).—Capital £500. Objects: To carry on the business of manufacturing chemists and druggists, etc. R.O.: 125-7 Euston Road, N.W.1.

Kemp & Company (Holloway), Ltd. (P.C.).—Capital £100. Objects: To carry on the business of chemists, druggists, etc. R.O.: Bank Chambers, 218 Upper Street, N.1.

J. & M. Newbery, Ltd. (P.C.).—Capital £100. Objects: To buy and sell cosmetics, toilet requisites, perfumes and beauty preparations, etc. R.O. 124 Regent Street, W.1.

J. W. Simpson (Chemist), Ltd. (P.C.).—Capital £100. Objects: To carry on the business of wholesale and retail chemists and druggists, etc. R.O.: Aldwych House, Aldwych, W.C.2.

Avis Fertiliser Co., Ltd. (P.C.).—Capital £500. Objects: To carry on the business of manufacturers of and dealers in fertilisers of all kinds, chemists, etc. R.O.: 304 Edgware Road, W.

Wilsons (Bolton), Ltd. (P.C.).—Capital £500. Objects: To carry on the busines of chemists, drug merchants, opticians, etc. Solicitors: Campbell & Pasquill, Prudential Buildings, Wigan.

E. J. Kieft (Chemists), Ltd. (P.C.).—Capital £500. Objects: To carry on the business of manufacturing and general chemists, herbalists, etc. Solicitor: W. R. Francis, 5 Fisher Street, Swansea.

Goosey & Rogers, Ltd. (P.C.).—Capital £500. Objects: To adopt an agreement with H. H. Rogers, S. R. Clarke and the exors. of the will of Lizzie F. Morgan, and to carry on the business of chemists and druggists, etc. R.O.: 51 Ben Jonson Road, Stepney.

Barbet, Ltd. (P.C.).—Capital £2,000. Objects: To carry on the business of manufacturers of and dealers in stills and other apparatus for distillation and treatment of alcohol and all chemical products, etc. The first directors are to be appointed by the subscribers.

Jean Hamilton, Ltd. (P.C.).—Capital £1,000. Objects: To carry on the business of manufacturers of and dealers in cosmetics, perfumes and other toilet articles, chemical and other goods, etc. The first directors are not named. Solicitor: John B. Borer, 233 Regent Street, W.1.

Kemitype, Ltd. (P.C.).—Capital £25,000. Objects: To carry on the business of manufacturers of and dealers in copying and printing apparatus, chemicals, inks, photographic apparatus, films, plates and papers, etc. The first directors are not named. Solicitors: Dinn & Son, 24 Walbrook, E.C.4.

London Solvents, Ltd. (P.C.).—Capital £100,000. Objects: To carry on the business of manufacturers, retailers and exporters of alcohol, spirits, acetic acid, aceto, butyl, ethyl, esters, petroleum, acids, salts, nitrates and chemical products for industrial, chemical, medicinal and other use, etc. The first directors are to be appointed by the subscribers. Solicitors: Nash, Field & Co., Fraleigh House, Laurence Pountney Lane, E.C.2.

Industrial Gases (I.F.S.), Ltd. (Public Company).—Registered in Dublin. Capital £30,000. Objects: To carry on the business of manufacturing, compressing, and dealing in oxygen, acetylene, hydrogen, nitrogen, carbonic acid and other gases, carbide of calcium, etc. Percy C. Liversidge, "Stonegarth," George Road, Kingston Hill, Surrey (managing director British Oxygen Co., Ltd.); Charles A. Dunbar, Lawrence Hall Hotel, Ham Common, Richmond, Surrey (managing director British Oxygen Co., Ltd.); Robert B. Scribner, "Osborne," Seapoint, co. Dublin; James Moran, "St. James," Howth Road, Dublin; David Frame, "Tramore," Novarra Road, Bray, co. Wicklow; Thomas Buchanan, "Spring Bank," Iona Park, Dublin, directors.

The Lancashire Soap & Chemical Co., Ltd.—At a meeting held in Manchester on June 24 it was resolved that this company be wound up voluntarily. Mr. H. Vogel, 1b Cooper Street, Manchester, was appointed liquidator.

Charles Thornhill & Co., Ltd., 59 Mark Lane, E.C.3, advise us that Col. F. G. G. Bailey, Mr. J. U. T. Shuttleworth and Mr. Arthur Lehmann have joined the reconstructed company, which will be called "Charles Thornhill & Co. (1935), Ltd." The business will be carried on as before.

Hugh Moore and Alexander, Ltd., Dublin.—Report for the year ended March 31, 1935, shows a profit, after writing off bad debts, repairs and income tax, of £1,897 against £1,010 and the sum available, including £143 balance of investment account transferred, £4,349. Depreciation of plant, etc., and directors' fees amounted to £1,506 as against £1,690 and a sum of £511 was written off the premises, leaving £2,322 to be carried forward, as compared with £2,309 brought in.

Voluntary Liquidation

Hewish & Melhuish.—Moorgate, London, E.C.; Dorset Street, W.1; Bromley; and Sundridge Park, chemists and druggists. A meeting of the creditors was held recently at 73 Cheapside, E.C. It was reported that the liabilities amounted to £3,173 19s., of which £1,170 11s. 6d. was due to the trade, and there were cash creditors for £1,807 11s. 6d. In addition there was an amount of £193 16s. due in respect of the rent. The assets totalled £1,947 2s. 3d., from which had to be deducted preferential claims of £339 and fully secured creditors' claims of £250, leaving net assets of £1,357 8s. 10d., or a deficiency of £1,816 10s. 2d. It was reported that the company was incorporated in October, 1932, with an authorised capital of £4,000, all of which was subscribed for in cash. The company purchased the business at Moorgate in November 1932 for £2,750, and in May last the landlord distrained in respect of rent. The Dorset Street business was purchased in January 1933 for £500, and the landlord had also distrained for rent at those premises. In November 1933 the company purchased the business at Bromley Hill for £400 and there was still £150 due to the vendors. In December 1933 the Plaistow Lane business was purchased, together with another branch at College Road, Bromley, for £320. There had been a distraint at the Plaistow Road premises in respect of rent. A resolution was passed in favour of the appointment of Mr. Granville White as liquidator, with a committee of inspection.

Compulsory Liquidation

Merry & Bright, Ltd., 11-12 Finsbury Square, E.C., and elsewhere, chemists and druggists. Under the compulsory liquidation the liabilities are returned at £1,812 against assets £8, and the issued capital consisted of 100 ordinary shares of £1 each. Mr. H. P. Naunton reported that the company was formed in April, 1934, and carried on business at 421 Lea Bridge Road, Leyton; 82 George Street, Euston Square, N.; 105 Clerkenwell Road, E.C., and 16 London Wall, E.C. The company sold goods at a very low percentage of profit, relying for profits chiefly on cash discounts and a large turnover. Certain proprietary goods were sold at cut prices, and the supplies of such goods were stopped, whereupon the business came to an end. The failure was further attributed to lack of capital. The liquidation remained in the hands of the Official Receiver.

Business Changes

Mr. David Pomeroy, chemist and druggist, has taken over another branch at 23 Osborne Street, E.1, formerly occupied by Herman's, Ltd., chemists.

Mr. John Alex. Jackson, wholesale and manufacturing chemist, Belvedere Buildings, London, S.E.1, has taken into partnership Mr. F. W. Kedge.

Mr. Thomas Loudon, chemist and druggist, has acquired the business of Mr. Alexander H. Tait, chemist and druggist, 58 New Street, Dalry, Ayrshire.

Mr. J. Macdougall, chemist and druggist, has acquired the business of the late Mr. Francis W. Soddy, chemist and druggist, 109 Caledonia Road, Glasgow, 5.

Mr. W. Riddoch, chemist and druggist, has purchased the business known as the Paddox Pharmacy, 316 Hillmorton Road, Rugby, from Mr. J. Gordon Ryland, chemist and druggist.

Miss Elizabeth M. Bruce has acquired the business formerly carried on by Mr. William Bruce, chemist and druggist, at 138 Union Street and 5 Wellgate Street, Larkhall, Lanarkshire.

Gazette

Bankruptcy Acts

Adjudication

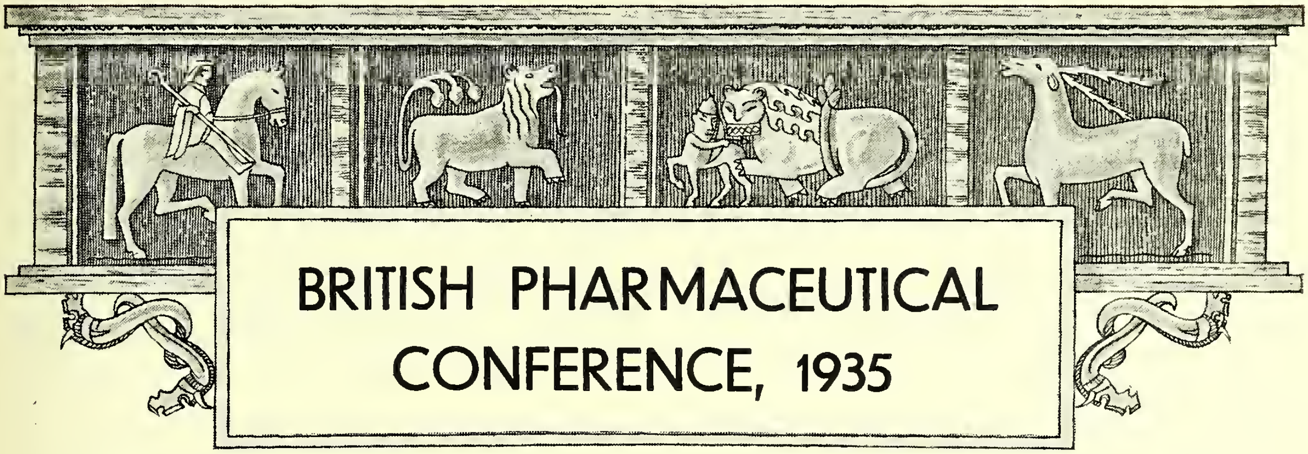
Barham, J., 36 Lower Kennington Lane, London, S.E.11, chemist.

Receiving Order and Adjudication

Watkins, E. A. E., lately at 733 London Road, Westcliff-on-Sea, chemist.

Stock Exchange Prices

£1 shares unless otherwise stated	Dec. 31, 1934		May 31, 1935		June 28, 1935	
	s.	d.	s.	d.	s.	d.
Allen & Hanburys, 7% Prefd. Ord. ...	21	3	21	0	24	0
Amalg. Dental Co., 8% Prefd. Ord. ...	23	9	22	0	23	6
,, ,, Deferred £1	8	3	7	0	8	9
Ayrton, Saunders & Co. 7½% Pref. ...	19	6	21	0	21	9
Beechams Pills, Deferred 5s. shares ...	26	6	25	0	24	9
Benger's Food, Ord.	43	6	40	6	41	3
Benzol & By Products cum. part. Pref. ...	2	6	2	0	1	9
Berger (Lewis) & Sons, Ord....	41	3	61	3	61	3
Blundell Spence & Co.	19	0	19	0	17	0
Boake (A.), Roberts & Co., 5% Pref. ...	21	3	21	3	21	3
Boots Pure Drug, Ord. 5s. shares	46	0	48	1½	49	3
Boots Pure Drug, 7% "A" Prefd. Ord. ...	31	0	32	0	32	0
Boots Cash Chemists (S.), 6% "A" Pref....	28	9	28	9	28	9
Borax Consold., Dfd. Ord.	11	6	15	9	15	9
Bovril, Ord.	29	9	21	9	21	9
,, Defd.	17	9	15	0	14	3
British Cyanides, Ord., 2s. shares	3	1½	3	0	3	7½
British Drug Houses, The, Ord.	19	3	19	3	19	6
British Glues & Chemicals, 4s. Ord. ...	4	0	4	0	4	3
British Oil and Cake Mills, Prefd. Ord. ...	45	0	47	6	48	6
British Oxygen, Ord.	84	0	94	0	116	3
British Photo. Indus., 6% Cum. Pref. ...	3	0	3	0	3	0
Burt, Boulton & Haywood, Ord.	22	0	20	6	21	6
Bush (W. J.) & Co., 5% Pref. £5	105	0	105	0	110	0
Callard, Stewart & Watt, Ord.	5	6	3	9	3	9
Cooper, McDougall & Robertson, Ord. ...	35	0	36	3	36	9
Crosfield (Joseph) & Sons, 6½% Pref. ...	30	0	29	9	30	0
Dubarry Perfumery, Ord. 1s.	6	3	6	3	6	6
,, ,, 7½% Pref.	27	6	27	3	27	6
Eastman Kodak Com. (no nom. value) ...	$113½		$144		$146	
Eno Propriet'y, Ord. 5s.	12	0	9	9	9	9
Evans Sons Lescher & Webb, Ord. 6s. 8d. shares	2	9	3	3	4	3
,, ,, ,, 6% cum. part. Pref.	5	9	6	3	7	0
Field (J. C. & J.), Ord.	26	6	25	0	25	0
Galloway (P. H.), Ord. 2s.	3	9	3	9	3	6
,, ,, 7½% Cum. Pref.... ...	27	0	27	6	26	9
Genatosan, Ltd., 1s.	5	6	6	0	6	3
Gossage (William), 6½% Pref.	30	6	29	3	29	0
Griffiths Hughes (Kruschen) Ord.	49	9	58	6	58	3
Grout & Co., Ord.	19	3	23	0	27	0
Hodders, Ord. 1s.	0	6	0	6	0	7½
Ilford, Ltd., Ord.	27	6	25	4½	25	6
,, 6% Pref.	25	0	25	6	25	0
Imperial Chemical, 7% Pref.	34	1½	34	0	33	6
,, ,, Ord.	37	3	35	0	35	3
,, ,, Defd. 10s.	9	7½	8	6	8	6
Intern. Sponge Importers, 6% Pref. ...	16	9	12	9	13	0
Kent (G. B.) & Sons, 5½% Pref.	3	9	3	9	3	9
Knight (John), 25% Prefd. Ord.	95	0	100	0	100	0
Laporte (B.) & Co., Ltd., Ord.	104	6	107	6	107	6
Lever Bros., Ltd., 7% Pref.	32	0	32	6	32	6
,, ,, 8% Pref.	33	0	33	3	33	0
,, ,, 20% Prefd. Ord. £1 ...	75	6	79	0	78	6
Lewis & Burrows, Ord.	27	6	21	7½	22	0
,, ,, 6% Pref....	22	6	20	9	21	6
Liebig's Ext. of Meat, Ord. £5	£11¾		£13⅞		£13½	
Mellin's Food, 6% Pref.	1	3	1	0	1	0
Nathan, J. (Glaxo), 7% Pref.	25	6	24	6	24	6
,, ,, ,, 8% Prefd. 10s. ...	12	6	11	6	12	3
,, ,, ,, Ord. 1s....	2	6	2	9	2	7½
Pears (A. & F.), 5% Deb. £100	£110		£112		£112	
Phosferine (Ashton & Parsons), 8% cum. partic. Ord....	24	0	22	6	22	0
Reckitt & Sons, Ord.	115	3	113	9	113	9
Salt Union, Ord.	38	9	41	3	41	6
Sangers, Ord. 5s.	22	0	23	9	22	10½
"Sanitas," The, Co., 9% Pref.	31	9	32	6	33	3
Sanitas Trust, 10% partic. Pref.	29	0	31	0	31	3
Smith (Stephen) & Co., Ord. 5s.	12	9	12	9	12	6
Spratt's Patent, Ord.	71	9	70	0	70	0
Stevenson & Howell, 6¼% Cum. Pref. ...	26	3	26	0	26	3
United Glass Bottle Man., Ord	—		40	6	42	0
Veno Drug Co., 8% Pref.	27	9	25	6	26	6
Virol, Ltd., Ord.	26	3	27	6	30	0
,, 7% Pref.	26	0	26	3	26	3
White (A. J.), Ltd., Ord. 10s.	22	0	20	0	21	6
White (Timothy) & Taylors, 7½% Pref. ...	31	0	29	0	29	3
,, ,, Ord. 5s.	21	9	20	9	20	6
Woodlands Chemists, Ord. 5s.	—		5	0	4	10½
Wright, Layman & Umney (1932), 7% cum. Pref....	25	0	24	3	24	0
Yorkshire Indigo & Col. Dyers, 5s. Ord. ...	0	9	0	3	0	3



BRITISH PHARMACEUTICAL CONFERENCE, 1935

Proceedings

(*Continued from the "Conference Supplement," C. & D. June 29.*)

SCIENCE SESSION

Tuesday Morning

The Science Session opened shortly after 10 a.m. on Tuesday at the Municipal College of Technology. Dr. Crossley-Holland, chairman of the Conference, presided, and was supported by Mr. E. Saville Peck, president of the Pharmaceutical Society, Dr. Hampshire, Mr. D. Lloyd Howard, Mr. T. Edward Lescher and Mr. Boyes. The attendance numbered about 100. After welcoming those present, the chairman called upon Dr. Corran to read the first paper:—

Thyroid Standardisation and Dosage

By R. F. Corran, J. Pritchard and F. E. Rymill

[Abstract]

Some confusion has arisen as a result of the various attempts which have been made to compare the dose of the British Pharmacopœia, 1932 preparation of thyroideum siccum with those hitherto prescribed. The B.P., 1932 process for the preparation of thyroideum siccum consists of four essential stages:—(*a*) Trimming of the glands, followed by drying of the minced glands at a temperature not higher than 60° C. (*b*) Defatting the dried gland with petroleum of low boiling-point (40° to 60° C.). (*c*) Grinding of the defatted product to a fine powder. (*d*) Chemical standardisation of the fine powder on the basis of thyroxine iodine content, followed by dilution to the B.P. standard. The data recorded in the authors' table below refer to eighteen batches of ox thyroid glands, both fresh and frozen, which have been processed on a manufacturing scale, the batch size varying between 250 and 750 lb. of wet glands.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				Total iodine		Thyroxine iodine		
—	Moisture on wet gland per cent.	Fat on wet gland per cent.	Ratio wet/dried defatted	On wet gland per cent.	On dried defatted gland per cent.	On wet gland per cent.	On dried defatted gland per cent.	Total iodine as thyroxine iodine
Mean	66·9	9·29	4·29	0·104	0·434	0·039	0·163	37·7

(The original table contains details for each batch.)

Moisture and Fat Contents.—While the moisture contents of thyroid glands would seem to be fairly constant, only three samples showing a variation of more than 5 per cent. from the average, the fat contents, on the other hand, show a variation of about 100 per cent., this variation being due, in part, to the degree of trimming performed prior to drying of the glands. The figures given in column 4 for the ratio between wet gland weight and dried defatted weight are important in that this ratio is the figure which relates the thyroideum siccum of the B.P., 1914, to fresh gland. It is found to vary from 3.75 to 6.51 with an average of 4.29. It has usually been approximated to a figure of 5.0 ; it is obvious that this figure is fallacious. It is clear, therefore, that the variation in the ratio between wet gland weight and dried defatted weight is so wide that any approximation must be misleading.

Total and Thyroxine Iodine.—The figures for total iodine and thyroxine iodine contents are given for both fresh gland and for the dried and defatted gland, the latter being the figures of importance in the preparation of the B.P., 1932 product. The percentage of total iodine of the dried defatted gland varies very considerably, from 0.559 to 0.134—a variation of approximately 300 per cent. An equally wide variation is also found in the figures for percentage of thyroxine iodine, the limits in this case being 0.200 and 0.051. The figures given in column 9 show the variations in the percentage of total iodine in the form of thyroxine iodine. These figures range from 43.1 per cent. to 30.8 per cent. and are important in that they relate preparations based on total iodine content (e.g., U.S.P. X) with that based on thyroxine iodine.

The B.P., 1932, has stipulated that thyroid should be standardised primarily on the basis of thyroxine iodine content, but the work done by Thompson, McLellan, Thompson and Dickie and also by Lerman and Salter shows that although di-iodotyrosine, the acid-soluble fraction of thyroglobulin, may be inactive when administered alone, all of the organic iodine in the thyroglobulin is calorigenically active. If this latter is correct thyroid would seem to be more scientifically standardised on a total iodine basis. It is important that information be available correlating, as far as possible, the different preparations in use, with the B.P., 1932 preparation.

(*a*) *Preparations based on Fresh Gland.*—Preparations based on fresh gland weight should now be obsolete. It is impossible to compute any reliable relationship between fresh gland and the accepted pharmacopœial standards.

(*b*) *B.P., 1914 Product.*—This preparation is unstandardised dried defatted thyroid. As such the total iodine can vary between 0.200 per cent. and 0.051 per cent. Any comparison between this preparation and those based on total or thyroxine iodine would be subject to considerable error.

(*c*) *U.S.P. X Product.*—This preparation is standardised to contain 0.17 to 0.23 per cent. total iodine. From column 9 it will be recalled that the percentage of total iodine as thyroxine iodine can vary between the limits of 30.8 and 43.1, and it follows that the thyroxine iodine content of the U.S.P. product can show a corresponding variation of 40 per cent. From the two extreme values in column 9 of the table the relative activities of thyroid U.S.P. X (total iodine content 0.2 per cent.), and thyroid B.P., 1932, may be taken as approximately 74 ± 12 : 100.

For the assay of thyroid the B.P. method has been used, and although it requires considerable care in manipulation, it has been found to be reasonably reliable. (The method is described in detail.) The direct estimation of iodine on the acid insoluble precipitate containing thyroxine has been found to yield uniform results giving a useful check on the B.P. method.

The authors thank Evans Sons Lescher & Webb, Ltd., for permission to publish these results.

Discussion

The Chairman, in opening the discussion, called attention to the importance of work of this nature and to that under review in particular.

Dr. Hampshire considered that the method of standardisation suggested by the authors was an improvement on the B.P. process.

Dr. Corran said the figures available suggest that the percentage of total iodine present as thyroxine show wider variation still. In considering the figures there were so many factors which might affect results, e.g. time when the animals were killed, nature of the grazing and so forth. He considered the B.P. method to be a less satisfactory method than the direct. Replying to points raised by Mr. Walmsley, Mr. Powell and Mr. E. S. Peck, Dr. Corran said the experiments had been carried out on about 50 per cent. frozen gland. As regards liquid extract of thyroid, B.P.C., he considered that owing to the method of extraction this preparation was not so potent as it might be. He agreed that it was essential to standardise conditions to eliminate errors. This country could not cater for the demand for "offal," consequently it was essential to import from Australia and the Argentine.

Mr. Gamble raised the question as to whether thyroid should be standardised on thyroxine or total iodine. On this matter the U.S.P. and the B.P. were at variance.

Dr. Corran thought that before altering standards we should wait until more information was available on the quantitative side.

The next paper was on

The Effect of Hot Solvents on Ergot: With a Note on the Effect of Storage on the Activity of Ergot

By R. F. Corran and F. E. Rymill

[Abstract]

The British Pharmacopœia, 1932 process for the manufacture of ergota præparata includes a stage of defatting. In actual practice the method has been found to result in products whose fat contents varied from 1 per cent. to 10 per cent. It occurred to the authors that a process of hot defatting would give a more efficient extraction of fat, but this could only be possible if the alkaloids contained in ergot were stable under these conditions. In these experiments, two types of extraction have been used:—(*a*) Soxhlet extraction in which the condensed solvent percolated through the ground ergot, (*b*) reflux extraction in which the drug is extracted by the boiling solvent repeatedly until all fat is removed. The B.P. method of estimating total alkaloids was used in every case.

Table I

Solvent	B.Pt. ° C.	Alkaloids in defatted material	
		By Soxhlet extraction	By reflux extraction
Ether	35°	0·07 per cent.	0·04 per cent.
Light petroleum ...	46° to 48°	0·34 " "	0·33 " "
Dichlorethylene ...	47° to 50°	0·045 " "	0·09 " "
Trichlorethylene ...	86° to 87°	0·02 " "	0·03 " "
Benzene	80°	0·05 " "	0·04 " "

Undefatted ergot used contained 0.24 per cent. of total alkaloids as ergotoxine. When defatted by the B.P. method this contained 0.34 per cent. of total alkaloids as ergotoxine. It is clear, from this table, that in the cases of all solvents used, with the exception of light petroleum, the greater part of the alkaloidal activity is removed from the defatted material.

The point then arose as to whether the process of hot defatting had caused any decomposition of the alkaloids by these solvents and it was thus necessary to estimate the alkaloidal content of the fat-solvent mixture. After exhaustive reflux extraction, the fat-solvent mixture was extracted five or six times with a 1 per cent. aqueous tartaric acid solution. A white emulsion was formed, but on the addition of a little ether this separated easily and the aqueous layers were run off and the alkaloidal content estimated colorimetrically.

Table II

Solvent	Total alkaloids of sample	Total alkaloids by recovery	
		(*a*) from solvent	(*b*) from residue
Dichlorethylene ...	0·24 per cent.	0·17 per cent.	0·065 per cent.
Benzene	0·21 " "	0·16 " "	0·04 " "

These results prove that, within the limits of experimental error, the activity of the original ergot is accounted for quantitatively by the activities of the fat-solvent mixture and the defatted residue. Exposure to relatively high temperatures, for some hours, during the process of defatting does not result in any decomposition of the alkaloids. Hot defatting possesses the advantage that a more reliable product from the point of view of final fat content can be obtained.

During the course of the work certain results have been accumulated on the activity of various forms of ergot after varying periods of time.

Table III

Form of ergot	Alkaloids when defatted per cent.	Time of storage months	Alkaloids after storage per cent.	Fat per cent.	Moisture per cent.
Ergot prep. ...	0·120	7	0·117	1·6	9·6
" " ...	1·120	18	0·118	1·4	9·7
Conc. defatted ...	0·340	17	0·300	1·3	10·0
" " ...	0·360	7	0·350	0·32	10·0
Conc. undefatted ...	0·245	14	0·230	31·6	7·1
" " ...	0·250	7	0·240	28·0	7·6

These results would seem to indicate that powdered ergot, in any form, is comparatively stable over periods of time varying from seven to eighteen months; the findings in the case of ergota præparata are of particular interest.

This work was carried out at Evans' Biological Institute, Runcorn; the authors desire to express their thanks to Evans Sons Lescher & Webb, Ltd., for permission to publish these results.

Discussion

The Chairman said the paper was evidence of interesting and important work. The most important point was that ergota præparata had been found to retain its alkaloidal strength over a period of eighteen months.

Mr. Bennett congratulated Dr. Corran and his colleague on their interesting paper. Possibly Dr. Corran would agree that hot solvent extraction was satisfactory for small batches, but in large-scale processes it involved serious difficulties. The difficulty experienced with cold defatting may be due to the moisture content of ergot. He suggested that with the hot extraction process with petroleum and other solvents complex mixtures were formed. A satisfactory process would be to dry the ergot *in vacuo* with subsequent cold extraction.

Dr. Hampshire said he was interested in the finding that ergota præparata retains its alkaloidal strength over a period of eighteen months. This article was introduced into the B.P. in the belief that it was a stable product to replace liquid extract of ergot, which was known to be unstable. What actual

BRITISH PHARMACEUTICAL CONFERENCE 1935

temperature was obtained in the Soxhlet extraction? He inquired also what was meant by reflux extraction, and how was concentrated undefatted ergot prepared?

Mr. Powell said he was interested in the fat figures given. They were lower than figures found by him. It would increase expense of manufacture to reduce fat content to below 5 per cent.

Dr. Corran, in reply, said he agreed that the effect of moisture had a great effect on the extraction of fat. He mentioned that the fat in ergot was of low melting point, and that the rate of extraction might be facilitated by the fact that fat may be extracted at its melting point. He had little experience of extraction of ergot with cold benzene. The concentrated undefatted ergot was Portuguese and Spanish ergot in a ground condition.

The next paper taken was

The Estimation of the Mercury Content of Mercurochrome

By R. F. Corran and F. E. Rymill

[Abstract]

Preliminary experiments on the analysis of a number of commercial samples of mercurochrome by the B.P.C. methods of assay indicated that whereas certain samples failed to pass the required standards on more than one point, others were deficient only in their mercury content. These latter samples, however, when assayed by the method described in a previous paper, were apparently satisfactory, the mercury content conforming to the B.P.C. requirements. The object of this paper is to record investigations on the discrepancy apparently existing between the two methods of assay.

The B.P.C. method and the alkaline-permanganate oxidation method are then given, and the results of the preliminary experiments are shown in tabular form. In every sample examined there is an appreciable discrepancy in the findings by the two methods. The results obtained by the alkaline-permanganate method lie between the limits set by the B.P.C. (i.e., 25 to 28 per cent. of Hg), whereas the results given by the B.P.C. method are invariably outside the B.P.C. lower limit. It was decided to compare the results of a large number of assays by each method, using only one sample, in order to determine as far as possible the experimental error for each method and the relative values given by each for this sample. These results are shown in a table. It is evident, the authors state, that more consistent values are given by the permanganate method than by the B.P.C. method and that the results given by the latter method are again consistently lower than those given by the former method. It was thought that the comparative assay of a simple mercury salt, for example, mercuric chloride, would throw some light on this variation. This was accordingly proceeded with and, comparing the theoretical value for the percentage mercury in mercuric chloride (73.85 per cent.) with those cited in Table III, attention can once again be drawn to the discrepancies, previously recorded in the assay of mercurochrome.

Mercury in Mercuric Chloride
(Theoretical 73·85 per cent.)

By direct precipitation of Hg as HgS per cent.	By alkaline permanganate oxidation, per cent.	By B.P.C. method, per cent.
73·80	74·60	68·30
	73·50	75·80
	73·61	71·00
	74·09	70·60
	73·70	71·38
		70·20
		69·60
		70·00
		74·60
		72·18
		71·80
	Mean 73·90	71·40

The authors sum up their general conclusions as follows:—(1) Assuming that the B.P.C. method of assay for the mercury content of mercurochrome is accurate, and adopting the limits laid down in the particular monograph, not one manufacturer's sample examined by us conformed to the required standard. (2) The results obtained by the B.P.C. method of assay show an appreciable experimental variation. (3) The alkaline-permanganate oxidation method for the assay of mercury appears to give more reliable and consistent results than the B.P.C. method. This work was carried out at Evans' Biological Institute; the authors desire to express their thanks to Evans Sons Lescher & Webb, Ltd., for permission to publish these results.

Discussion

Mr. Brindle thought that neither of the processes was altogether satisfactory, and inquired whether the authors had tried the electrolytic method. The alkaline permanganate process seemed somewhat complex.

Mr. R. R. Bennett congratulated Dr. Corran on the work, as the determination of mercury in mercurochrome is an unsatisfactory one and the new method represented an advance. He asked if there was any loss by boiling and if the figures quoted were based on dry substance.

Dr. Corran, replying, agreed that the results were not so reliable as they might be. Heating for fifteen minutes might be responsible for the variations. The author had not yet tried the electrolytic method. All results had been obtained on material dried according to official requirements.

The Chairman congratulated the author on the three papers he had read and on the quality of the work.

The next paper, read by Mr. Walmsley, was on

The Determination of Ferrous Iron in the Presence of Organic Matter by Heisig's Method

By G. J. W. Ferrey

[Abstract]

The primary object of this paper is to show the suitability of the iodate method of Heisig for the assay of ferrous iron in compounds containing organic matter. In the B.P. method of assay for saccharated carbonate of iron carbohydrate is oxidised in preference to the internal indicator (diphenylamine), and the results are 7 per cent. too high. The iodate method gives accurate results, avoids the alternative of an external indicator, and possesses a sharp end-point.

The iodine monochloride reagent used is prepared by dissolving potassium iodate (6.44 gm.) and potassium iodide (10 gm.) in water (75 mils) and hydrochloric acid (75 mils). The general method adopted was to take 20 mils of the iron solution and 6 mils of the iodine monochloride reagent with sufficient hydrochloric acid to ensure the presence of 50 per cent. by volume of strong acid at the end of titration (more is undesirable except when there is a tendency to emulsification). The reagent must be added before the acid and titration proceeded with $M/20$ iodate solution, adding 5 mils of carbon tetrachloride solution just before the end-point. Table I gives the results of titrating 20 mils of $M/5$ ferrous ammonium sulphate solution (78.426 gm. per litre) in the presence of varying amounts of organic matter.

Organic matter added	Quantity added gm.	Approx. ratio of organic matter to ferrous iron	Water added mils	Hydrochloric acid added mils	M/20 KIO_3 required mils
—	—	—	—	50	20·03
—	—	—	—	50	—
Liquid glucose ...	1	4	10	50	20·00
,, ...	3	13	10	50	20·03
,, ...	10	43	20	70	20·10
,, ...	20	86	40	80	20·25
Acacia	0·3	1·3	20	80	20·02
Tragacanth	0·3	1·3	20	80	20·00
Acacia	0·3	2·6	20	80	20·02
+Tragacanth ...	0·3				
Acacia	0·3	11	30	100	20·03
+Tragacanth ...	0·3				
+Liquid glucose ...	2				

The high results with the larger amounts of liquid glucose are due to its sulphur dioxide content, but only 20 per cent. of that present is accounted for by the extra iodate used. This corresponds to iodine liberated by interaction of the free

BRITISH PHARMACEUTICAL CONFERENCE 1935

sulphur dioxide with iodine monochloride, only a small fraction of the combined sulphur dioxide being set free within the few minutes taken for titration. No emulsification occurred with acacia or tragacanth with the high proportion of acid used. Similar tests with sucrose, lævulose, dextrose, lactose, and invert sugar gave correct results, except amber solutions of invert sugar containing caramelised impurities. Glycerin, lactic acid and citric acid did not introduce error. However, the presence of liquorice or marshmallow in powder form caused appreciable error. Other tests show that assay by the Heisig iodate method fails in the case of compound syrup of ferrous phosphate owing to error resulting from the presence of cochineal. Quinine present in Easton's syrup results in high readings and makes the iodate method of assay inaccurate. Another table shows comparative assays of a sample of saccharated carbonate of iron by the iodate method and by titration with dichromate (using potassium ferricyanide as external indicator). The iodate method was applied by digesting about 2 gm. of saccharated carbonate of iron in a stoppered bottle with 20 mils of 25 per cent. w/v sulphuric acid, adding 6 mils of iodine monochloride reagent, 60 mils of hydrochloric acid, and titrating with *M*/20 iodate.

Weight of Ferri. carb. sacch. gm.	M/20 KIO_3 required mils	N/10 $K_2Cr_2O_7$ required mils	Ferrous iron, calculated as $FeCO_3$ per cent.
1·8347	38·45	—	48·53
1·7490	36·78	—	48·72
2·2322	46·82	—	48·58
0·9691	—	40·88	48·87
1·0556	—	44·42	48·75

The correct ferrous iron content of ferrous lactate is ensured in the B.P.C. monograph by three determinations: (1) residue on ignition, (2) a limit test for ferric iron, (3) a limit test for calcium and alkali salts. These three determinations might conveniently be replaced by a direct titration of ferrous iron by iodate.

Three assays of a sample of ferrous lactate by the iodate method gave a mean result of 27.85 per cent of Fe_2O_3, against 27.80 per cent. by difference between iodimetric assays of total iron and ferric iron. The B.P.C. method of determining ferric iron in the lactate, using equal volumes of hydrochloric acid and water, was found to give high and erratic results. The following gives consistent and accurate results. About 1 gm. of the salt is dissolved in 20 mils of water, 10 mils of hydrochloric acid added, followed immediately by 3 gm. of potassium iodide. When the iodide is dissolved, the solution is titrated with *N*/10 thiosulphate. (From the laboratories of James Woolley, Sons & Co., Ltd.)

Discussion

The Chairman remarked that the work gave evidence of a large number of experiments, and he inquired if any work had been done in connection with combinations of ferrous iron and glyco-gelatin.

Mr. Walmsley said they had done no work on the point raised by the chairman. There was no further discussion.

The next paper, read by Mr. Jones, was on

The Preparation and Properties of Iodoform and Thymol Iodide

By Norman Glass

[Abstract]

The author points out that the B.P. process of assay for iodoform is unsatisfactory unless the reaction mixture is well shaken from time to time, the best procedure being to start the test during the morning, mix at intervals during the day and then stand overnight before titrating. The twenty-five year old process of Clark is advocated, in which the reaction mixture [iodoform (0.5 gm.), methylated spirit (50 mils), decinormal solution of silver nitrate (50 mils) and nitric acid (5 mils)] is boiled under a reflux condenser for thirty minutes, cooled, diluted with water (150 mils) and titrated with decinormal thiocyanate solution. This process is much quicker and halves the error owing to the larger quantity of sample taken. Five samples tested assayed 97.62 to 98.34 per cent. of iodoform, i.e., below the B.P. requirement of 99 per cent., but the reason for the low assays has not yet been ascertained.

The drying of iodoform for technical and analytical purposes are two very different matters. Iodoform that has been washed with alcohol may be dried in warm air at about 130° C. without undue loss of material. The turbidity of the solution in chloroform is an excellent and ready means of discriminating between dry and moist material during technical production. On the other hand, the small amounts taken for analytical work lose weight slowly and consistently during drying in warm air or even *in vacuo* over sulphuric acid, and there is no method of discriminating between moisture loss and volatilisation of iodoform. The B.P. is at fault in stating that iodoform is "sparingly soluble in benzene" the solubility at ordinary temperature being 1 in 7. The error appears to be due to a mistranslation of "leicht" in "leicht loslich" as slightly or sparingly instead of the alternative easily.

Preparation of Iodoform

The method of Schmidt for preparing iodoform was investigated. In this a sufficiency of sodium hypochlorite solution is added to 50 parts of potassium iodide, 6 parts acetone, and 2 parts of sodium hydroxide in 1,000 parts of water. About 95 per cent. of the iodide may be changed into iodoform, the remainder passing mostly to iodate. Of the factors influencing the nature of the product, the following are the most important:—

(*a*) The yield is low and the colour poor unless a certain excess of caustic soda is attained.

(*b*) Excess of acetone must be avoided, as it is capable of reacting with the hypochlorite.

(*c*) Particle size and colour of product depend upon concentration of reaction mixture. Dilute liquors yield iodoform of pale colour and light density, whilst mixtures containing by-products give precipitates which are brighter and denser.

(*d*) Temperature is a deciding factor in particle size and colour. Working on 40 gallons of liquor, the heat of reaction causes a temperature rise of 15° to 17° C., and secondary reactions occur if the final temperature is over 30° C. A commencing temperature about 15° C. gives precipitates of bright yellow colour which are rather heavy and inclined to be granular (and hence easily washed and sieved).

When the initial temperature is 10° C. or lower, the product is lighter in colour and bulk and less easily washed, while it is difficult to sieve (owing to high susceptibility to electrification).

A faint odour (not unlike chloroform) develops during the addition of hypochlorite to the reaction mixture, which becomes more marked at higher temperatures. The high temperature products discolour on drying (due to iodine) and are liable to develop a chloroform-like odour on storage, and in particular undergo a peculiar physical change by shrinking to nearly half the original bulk, "setting" into a solid mass which requires considerable pounding in a mortar to reduce it to powder again.

The substance responsible for this phenomenon was isolated from a high temperature reaction mixture as an oil with a boiling point (180° to 182° C.) and specific gravity (3.23), agreeing closely with that of methylene iodide. This was confirmed by bromination to methylene bromide. Furthermore, a little methylene iodide mixed with dry precipitated iodoform in a mortar causes it to "set." Methylene iodide is decomposed by exposure to light (with liberation of iodine), but is surprisingly stable to alcoholic silver nitrate and nitric acid (half an hour's boiling in the Clark method of assay failing to decompose more than 50 per cent. of the methylene iodide present). The effect of adding methylene iodide to iodoform is remarkable, iodoform containing a small amount melting to a brown heavy oil on the application of a gentle heat. Alcohol added to this oil removes the methylene iodide, and the iodoform crystallises out in the form of broad needles instead of the usual hexagonal plates. Photographs show this tendency to needle formation in precipitates of iodoform made at high temperature (55° C.).

Preparation of Thymol Iodide

Thymol iodide (or aristol) is in greater demand abroad than in this country. There are two general methods of preparation. One consists of a process similar to that outlined above for iodoform, with a solution of thymol in caustic soda substituted for the acetone. The other and more usual method adds a solution of potassium iodide and iodine to a solution of thymol in caustic soda. The proportions in this last method are varied by different authorities, the extent of the variation being shown in a table. When iodine dissolved in potassium iodide is added to a solution of thymol in sufficient caustic soda, there is no precipitate unless iodine is available in excess. There appears to be a preliminary reaction, preparing the thymol for iodination, over 75 per cent. of the iodine added being used for this purpose. This means that 1 gm. of thymol, instead of using only 0.866 gm. of iodine according to the dithymol diiodide formula, requires about 3 gm. extra to perform this initial reaction. It is remarkable that the iodine used for this first reaction is converted to iodide alone, iodate being only formed in small amounts during the actual precipitation of the aristol in the second stage of the reaction.

The hypochlorite process for making thymol iodide is given in the United States Dispensatory as follows:—" Thymol, 50 grams; potassium iodide, 58 grams; sodium hydroxide, 50 grams; water to make 500 mils; solution of chlorinated soda, to make 3,000 mils. Dissolve the thymol, potassium iodide and sodium hydroxide in sufficient water, add the solution of chlorinated soda, collect the precipitate on a paper and wash with water until it is free from chlorides." The process works well, and is an obvious saving of material over the iodine method. The only trouble is that the compound so formed assays about 30 per cent. of iodine instead of over 40 per cent. as demanded by the B.P.C. The most straightforward explanation of this low iodine content is that this particular process will not yield the same aristol as that given by the direct process (in which between four and five times the theoretical amount of iodine is required to bring about complete precipitation of the thymol, while 10 per cent. is ample excess when the hypochlorite method is used).

In an investigation it was observed that simple admixture of sodium hypochlorite solution with thymol in caustic soda produced a brown resinous deposit. This fact suggests the possibility of chlorination as well as iodination taking place during the precipitation of the aristol, and this was found to be the case.

All the aristols prepared with sodium hypochlorite were consistently low in iodine and contained a proportion of chlorine. Samples from commercial sources which were low in iodine were also found to contain chloride. In a general way, as the iodine content fell the chlorine content rose. A commercial sample with 47.9 per cent. of iodine was found to contain no chlorine at all. (Tables give the results of a series of tests on samples made in the laboratory and on various commercial supplies.) The work was carried out in the laboratories of Evans Sons Lescher & Webb, Ltd., Liverpool.

Discussion

The Chairman said the question of iodoform was very important, and he had hoped that the author would have pointed the way to production of amorphous iodoform. Iodoform could be an irritating substance on account of its crystalline tendency.

Dr. Hampshire said he had checked the author's solubility figure and had found 1 in 7½ in benzene at 15.5°.

Mr. Meek commented on the photo-micrographs. Examination of preparations of iodoform by the microscpoe in regard to size of particles had been brought to the front by this paper.

Mr. Jones, in reply, said he did not dispute the figure of 1 in 7½ for solubility.

There was no discussion on the second part of the paper.

The next paper was read, in the absence of the author, by Dr. Hampshire.

The Preparation of Sterile Solutions—II

By H. Davis

[Abstract]

In a previous paper on "The Preparation of Sterile Solutions," the writer showed that, in the presence of contaminating spores, no reliance could be placed on the Tyndallisation process. As reliance is placed on the method by many other pharmacopœias it was felt that the process warranted a complete investigation. The incidence of sterility in substances commonly used for the preparation of injections as stored under ordinary conditions was investigated by the author. A quantity of the substance to be tested was taken from the ordinary stock bottle with a sterile spatula and dropped (1) into broth and (2) washed on to agar with sterile water and incubated for a week. (The results are shown in tabular form.) The results would appear to show that most substances are sterile, the exceptions being such substances as sodium chloride, sodium bicarbonate and dextrose. It is thus quite obvious, the author states, that a solution prepared with aseptic precautions cannot be relied upon to be sterile, although it is probable that with many solutions sterility would be attained.

The next series of experiments aimed at a complete investigation of the Tyndallisation process, the solutions being prepared with distilled water (not sterile) in previously sterilised containers. Sterility tests were made before the first heating and after the first, second and final heatings. (The results are tabulated.) In ten out of twenty-five injections sterility was evidenced even before undergoing the first hour's heating. After the first heating of one hour at 80° C. all were sterile. From these and previous experiments, the author states, one is led to assume that for the sterilisation of many common hypodermic injections the principles underlying the Tyndallisation process have been incorrectly applied, and he sums up the situation as follows:—(1) In the presence of contaminating spores a sterile product is not obtained by heating at 80° C. for one hour on three successive occasions. (2) In the absence of spores and, when prepared with suitable precautions in regard to cleanliness and sterility of containers, the common parenteral injections are sterile after the first heating.

The next investigation was on the action of some common medicaments on *Staphylococcus aureus*. A twenty-four hours' culture on agar was suspended in sterile water, and opacity tubes showed the suspension to contain 300 million organisms per mil. 0.6 mil was added to 20 mils of each sterilised injection and allowed to stand at the laboratory temperature. Sterility tests were made at intervals of twenty-four hours, forty-eight hours and one week, and the results are given in a table. A summary of results shows that, when heavily contaminated with living organisms of *Staphylococcus aureus*, fourteen out of thirty-seven injections possessed sufficient germicidal power to kill within twenty-four hours, eighteen within forty-eight hours and twenty-seven within a week.

These results led to an investigation of the germicidal activity of a number of recognised preservatives on the same organisms in order to see whether some of the common medicaments were as active in themselves as some of these antiseptics. The results are summarised in tables under the following headings:—Phenol; trikresol; *p.*-chloro-*meta*-cresol; muthiolate; chlorbutol; nipasol sodium; nipagin M.; and nipasol M. It is obvious from these tables, the author states, that muthiolate is by far the most powerful germicide, a solution 1-100,000 being sufficient to kill the organism within thirty minutes. Athough nipasol, nipagin, etc., have been recommended by Eschenbunner, the results show that concentrations up to 0.6 per cent. of nipasol sodium, and saturated solutions of nipagin M. and nipasol M. have little germicidal effect on *Staphylococcus aureus*. Chlorbutol also gave unsatisfactory results, a 1-200 solution failing to kill within twenty-four hours. *P*-chloro-*meta*-cresol proved very efficient, and a concentration of 0.05 per cent. was approximately equivalent in germicidal power to 0.5 per cent. phenol and 0.3 per cent. trikresol.

(From the Department of Bacteriology, University College Hospital Medical School.)

Discussion

Dr. Corran called attention to the fact that distilled water is liable to be very contaminated, the degree of which depends

BRITISH PHARMACEUTICAL CONFERENCE 1935

on atmospheric conditions. He inquired if the author's results were obtained in hot and dry or cold and wet weather.

Dr. Hampshire said he could not answer Dr. Corran's question, but he did stress the importance of clean technique in all work of this nature.

The next paper was on

The Assay of Glyceryl Trinitrate Tablets

By Wilfred Smith

[Abstract]

Tablets of glyceryl trinitrate were official in the 1914 B.P. and are now official in the 1932 B.P. In neither pharmacopœia is any method of assay laid down. The author reviews previous assay methods and discusses their difficulties.

The Method.—Place five tablets in a 500-mil Kjeldahl flask, add 25 mils saturated sodium sulphate solution, 75 mils water and sufficient sulphuric acid to make just acid to litmus paper (usually 0.3 mil of $N/1$ sulphuric acid required). Distil just to dryness, using a still head, into a flask containing 10 mils of $N/10$ sodium hydroxide, keeping the outlet tube below the surface of the alkali. Wash down the condenser and outlet tube and evaporate the sodium hydroxide solution to dryness. Add 2 mils of water, 0.3 gm. (± 0.01 gm.) of reduced iron and 2 mils of 50 per cent. v/v sulphuric acid, allow to stand for ten minutes and boil for two minutes. Transfer the acid solution to a steam distillation apparatus, make alkaline with 4 mils of saturated sodium hydroxide solution and distil the liberated ammonia into a flask containing 10 mils of $N/10$ sulphuric acid until the distillate measures 500 mils. Take 100 mils of the distillate, add 2 mils of Nessler's reagent and compare the colour produced with that produced by adding the same amounts of reagent to 100 mils of a solution containing ammonium chloride equivalent to 0.1 mgm. of nitrogen.

The colours produced are most easily compared in a colorimeter, but a tintometer or even Nessler glasses could be used for the purpose. Whatever means of comparing the colours is used the colour of the unknown should not vary more than 20 per cent. from that of the standard. A control experiment must always be carried out exactly as described. In order that the control shall contain ammonia in practically the same concentration as the standard, the 500 mil distillate will need to be concentrated to 100 mils (usually). From the difference between the nitrogen content of the experimental solution and the control, the glyceryl trinitrate present can be calculated. Factor, Nitrogen to glyceryl trinitrate 5.4.

Samples of tablets were examined which were approximately a year old. By the above method the following results were obtained:—0.00035 gm.; 0.00032 gm.; 0.00032 gm. per tablet. Fresh tablets were prepared and assayed within twenty-four hours of their preparation. The results obtained were:—0.000425 gm.; 0.00044 gm.; 0.00040 gm. per tablet. Tablets were prepared from which the glyceryl trinitrate had been omitted in order to observe whether any reducible nitrogen could be distilled from the chocolate base. The nitrogen content of the solution so obtained was slightly less than that of the control, so that there seems to be no possible source of error from the chocolate base. Tablets were prepared without the cocoa and assayed by the above method with the following results:—0.0004 gm.; 0.00038 gm. per tablet.

Samples of reduced iron B.P. were obtained from various chemical firms. The samples differed widely in colour, lustre and grittiness. They were each assayed by the B.P. method for metallic iron content and each used in the reduction of potassium nitrate by the B.P. method for the assay of that salt. From the results obtained it would appear that reduced iron which satisfies the B.P. requirements would be suitable for use for nitrate reduction.

The author thanks Allen & Hanburys, Ltd., for permission to publish his paper.

The discussion on this paper was taken in conjunction with the next contribution on

The Assay of Glyceryl Trinitrate Tablets

By H. O. Meek

[Abstract]

At least three colorimetric methods have been recommended from time to time for the estimation of small quantities of glyceryl trinitrate in tablets. The author reviews previous work. The final method adopted by him is as follows:—

For tablets of B.P. strength, weigh accurately the equivalent of 1 mgm. of glyceryl trinitrate, in the form of powdered tablets, into a stoppered cylinder containing exactly 5 mils of glacial acetic acid. Shake continuously for one hour, filter and transfer 1 mil to a small porcelain dish. To this promptly add about 2 mils of phenoldisulphonic acid, stir well and allow to stand for fifteen minutes. Dilute with about 8 mils of water, make alkaline cautiously with ammonia and transfer to a 25-mil stoppered vessel. When cool adjust the volume to 20 mils and the temperature to 20° C. and filter. Compare the colour in suitable glass containers with that produced as follows: (1) Dilute 1 mil of solution of glyceryl trinitrate of exactly 1 per cent. strength with 50 mils of glacial acetic acid, mix thoroughly, transfer 1 mil to a porcelain dish, add phenoldisulphonic acid and proceed as above. (2) Transfer 1 mil of a 0.225 per cent. aqueous solution of silver nitrate, B.P., to a porcelain dish, evaporate gently to dryness, add phenoldisulphonic acid and proceed as above. The colour produced in all three cases should be equal to 7.0 Lovibond yellow units when viewed through a glass cell of 1 inch internal width.

Attention is drawn to the following details. Should only one or two tablets be available these may be added direct to the 5 mils of glacial acetic acid; they can be easily disintegrated into fine particles by pressure from a glass rod. Potassium nitrate, whether fused or not, has been found to be unsatisfactory for control purposes, the figures tending to be high. The temperature of the liquid when the colour is taken should be as near to 20° C. as possible (the colour at 25° C. being about 10 per cent. higher than at 15° C.). The 0.225 per cent. solution of silver nitrate can be readily prepared by diluting 26.3 mils of the $N/10$ reagent to 1 litre. (Some results of tests on the keeping qualities of tablets are given in a table. The tablets were prepared as follows:—(*a*) Lactose base. (*b*) Glucose base. (*c*) Lactose base containing 25 per cent. of chocolate with a water-soluble alkalinity, as K_2O, of 0.2 per cent. (*d*) as (*c*) with an alkalinity of 1.3 per cent.) The figures indicate that tablets made with either a lactose or glucose base may keep remarkably well. When a chocolate base is used the amount of water-soluble alkali should be strictly limited; the percentage of chocolate in the base might also be specified. It is notable that (*b*) and (*c*) tend to stabilise after about six months, so a second year's figures on these should be interesting. The tablets in all cases were stored in well-corked bottles and kept in a cupboard under ordinary laboratory conditions.

Mr. F. G. Salvin has given helpful suggestions. (From the analytical laboratory of Boots Pure Drug Co., Ltd.)

Discussion

Mr. Walmsley said when glyceryl trinitrate was given with chocolate, it dissolved in the theobroma and became therapeutically active. It had been suggested that when the tablet was made so that a disintegrator was necessary there was a possibility of the glyceryl trinitrate causing irritation.

Dr. Hampshire thought the nature of the base was a matter of pharmaceutical convenience. He suggested there was no evidence of these minute doses acting as an irritant.

Mr. Nutter Smith said quite a good tablet could be made from lactose.

Mr. Meek, in reply, said phenoldisulphonic acid is not open to the same objection as diphenylamine because the yellow colour given by the former is not produced by any oxydising agent, but by nitration. It is possible for discoloration to take place if the tablets are extracted with alcohol, through the charring of sugars present. Confusion between chocolate and cocoa may exist; the monographs in the B.P.C. are useful on this point. Mr. Smith tests his raw materials first, but this is not always possible when tablets have to be examined. It is preferable for the nitrogen present to be estimated as nitrate.

This concluded the morning session.

SCIENCE SESSION

Tuesday Afternoon

The first paper taken at the afternoon session was read by Mr. Bull, whose son was the author.

BRITISH PHARMACEUTICAL CONFERENCE 1935

Percolation of Cinchona and Belladonna: The Rate of Alkaloid Extraction and Effect of Degree of Comminution

By A. W. Bull

[Abstract]

Although the process of percolation has been established in pharmacy for over a century, it would seem that full information on certain points of the process is still lacking. The state of comminution of the drug is a factor on which depends in no small measure the success of the process. The literature contains little information on this subject, and information which is given seems to be based more upon opinion than facts, no definite figures being provided in most cases. Figures for the proportion of active material to inert matter in successive fractions of percolate are also wanted in the case of many drugs. For alkaloidal drugs which lend themselves to analysis, this may be expressed by the proportion of alkaloid to total solids.

Cinchona

The first experiments were conducted with cinchona. The menstruum was alcohol (80 per cent.) and this was chosen in order to prevent complications arising due to chemical changes which so often occur when an acid or alkaline menstruum is used. A stock supply of the powdered drug was prepared, being ground in a disintegrator, using a No. 8 screen. From this original bulk, supplies of 22/60, 44/85 and 85 powders were prepared, these being ground in smaller hand mills. 100 gm. of each powder size was taken and moistened with 100 mils of alcohol (80 per cent.). The mass in each case was set aside in a closed vessel for four hours and was then packed into a percolator and, after the addition of menstruum, allowed to macerate for twenty-four hours. The three percolators used were identical in size and shape and they were packed in as similar a manner as possible. Samples each of 50 mils of percolate were collected separately from each percolator. (The process and apparatus are described, with an illustration, and a percentage table of total solids w/v is given.) It is seen that the moderately fine powder, 44/85, shows most rapid extraction of total solids. (The results of the alkaloidal assay of the various fractions are shown in the next table.) Again it is seen that the moderately fine powder, 44/85, gives quicker extraction of alkaloids. (The figures for the ratio of alkaloid to other solids, i.e., percentage of total solids *minus* percentage of alkaloids, are given in the next table, expressed as parts of alkaloid per 100 parts of other solids.) It is seen that in the case of cinchona, the inert material is extracted more quickly than the alkaloids, under the conditions of these experiments at least, and that the proportional alkaloidal content of successive fractions increases (an illustration is given). A study of the figures reveals that an optimum degree of comminution exists, and that an 85 powder is less easy to extract than the coarser 22/60 powder.

It would be supposed, then, that if a supply of powder were separated into portions by means of sieves of various sizes and then packed in such a manner that the most difficult powder to extract was on top and thus came into contact with fresh menstruum, this should give better extraction than any other method of packing. (The weights of the various powder grades in 100 gm. of drug are shown.) Three quantities of 100 gm. each of the stock supply of powdered cinchona were taken and the powders in two cases separated into various sizes by means of sieves. The individual grades of powder were moistened with a volume of alcohol (80 per cent.) equal to their weight in grams, e.g., 30 gm. with 30 mils. After the requisite time, three percolators were packed: one with unsifted powder as a control; one with the finest fraction at the bottom and the coarsest at the top, the intermediate layers being progressive in powder size; and the third with coarse powder at the bottom and fine at the top. Fractions of 50 mils were collected from each percolator, the rate being adjusted as near to 8 drops a minute as was possible. Again alcohol (80 per cent.) was the menstruum. Fractions were assayed for total extractive and for alkaloids, by the methods previously used. (The results are shown in a table.) The extraction is best when the finest fractions of powder are uppermost. Rapid extraction is especially noticeable in the first two portions of 50 mils collected in this case. That is, extraction occurs most quickly when the percolator is packed in such a manner that the portion of drug most difficult to extract comes in contact with fresh menstruum. (Another table is given.) A similar effect is observed, in the case of alkaloidal extraction, to that noted for extraction of total solids under the conditions of these experiments.

Belladonna Root

A supply of belladonna root was prepared as stock, using a disintegrator and a No. 8 screen. Supplies of 22/60, 44/85 and 85 powders were then prepared Quantities of 120 gm. of each size were taken and percolated with the official menstruum of seven parts of alcohol (90 per cent.) and one part of distilled water. After the preliminary moistening and maceration, three percolators, identical in design, were packed as similarly as possible, although without leaving spaces in the drug column it was found impossible to pack the 85 powder in a volume corresponding to that for the other two powder sizes. Equal pressure was used in packing each column of drug. Percolation proceeded at the rate of 8 drops per minute as nearly as could be controlled, and fractions of 50 mils were collected. The successive percolates were assayed for total solids, by drying a definite volume to constant weight in an air oven at 100°. The alkaloidal content of fractions was determined by the official method for liquid extract of belladonna. (The results obtained are shown in a table.) These figures show that an optimum degree of comminution exists for the extraction of total solids of belladonna root. The 44/85 powder gave the best results of the three powder grades used in these particular experiments. For alkaloid extraction (shown in a table), a moderately fine powder (44/85) is preferable to either a fine powder (85) or a moderately coarse one (22/60). When the ratio of alkaloid to total solids is considered, it is seen that the value decreases as the successive fractions are considered (an illustration is given). This indicates that for the particular menstruum used the alkaloids are soluble more quickly than are the other extractable constituents of the drug. It is hoped to continue investigation on similar lines for other drugs and for other variable conditions, and also to repeat them with other batches of cinchona and belladonna root.

From the School of Pharmacy, University College, Nottingham.

Discussion

The Chairman said this was a most useful and interesting paper as such work aids the activity of drugs. The seeking of optimum points is of great value therapeutically and economically. Mr. Bull, jun., was to be complimented on a paper of real pharmaceutical value that would lead to the adoption of new facts and figures which have been found so convincing.

Dr. Hampshire congratulated Mr. Bull on starting on a subject which needs investigating. He asked how the flow of menstruum was affected by the packing of the fine powder on top.

Mr. Powell suggested with reference to cinchona that some alkaloids come out quicker than others.

Mr. Nutter Smith pointed out that different methods of grinding might produce different results. Using the same grades of powder produced by different methods of grinding may have a bearing on the extractive properties.

Mr. Walmsley advocated extension of the work to more drugs. He could confirm the work on belladonna and generally on solanaceous roots.

Mr. D. J. Williams characterised the paper as useful from a practical and an academic point of view. He endorsed the remarks of Mr. Nutter Smith and asked if hydration had any effect on the rate of extraction.

The Chairman remarked that some years ago it had been found in France that certain alkaloids were either more or less active according to the amount of extractive matter present.

Mr. Bull said the manner of packing had not materially affected the rate of percolation. He believed it was possible for alkaloids to be obtained fractionally from cinchona. There is a good deal of evidence regarding the effect of grinding, but

BRITISH PHARMACEUTICAL CONFERENCE 1935

as a rule commercially the most appropriate method is selected, for instance, ipecacuanha was ground in two stages. Many alkaloids are affected by other matter.

The next paper, read by Mr. Boyes, was

A Note on Isopropyl Nitrite

By C. L. M. Brown

[Abstract]

Sweet spirit of nitre has long been a source of trouble to the pharmacist because of the ease with which its chief active constituent, ethyl nitrite, volatilises. The author felt that a preparation that could be made extemporaneously would be a distinct advantage, and the use of isopropyl nitrite instead of ethyl nitrite seemed worthy of trial. A simple apparatus for the preparation of isopropyl nitrite, together with a method, is described, and the properties of the product are given. For the extemporaneous method the apparatus used consisted solely of dispensing measures, an ordinary 4-oz. dispensing bottle, and a glass syringe. 3.5 gr. of sodium nitrite was dissolved in 5 mils of water and added, a few drops at a time, with constant shaking, to a mixture of 10 mils of isopropyl alcohol, pure sulphuric acid 1.5 mil and water 6 mils, well cooled in running cold water. The product was then transferred to a 4-oz. bottle containing 25 mils of brine solution and well shaken, and the mixture sucked up into a glass syringe, allowed to separate and the lower aqueous layer expelled. It was similarly washed with 10 mils saturated sodium carbonate solution. The product measured 3.7 mils. It was made up to 100 mils with isopropyl alcohol and estimated; 2 mils yielded 14 mils nitric oxide. Thymol blue acidity test gave no pink colour. The preparation was repeated, omitting the washing with brine solution, and saturated sodium carbonate solution, and the product (4 mils) diluted to 100 mils as before; 2 mils yielded 14.2 mils nitric oxide. Thymol blue acidity test gave no pink colour. In the foregoing experiments excess of isopropyl alcohol was used. The experiment was, therefore, repeated using quantities approximating to the theoretical, viz.:—

Sodium nitrite	3·5 grains	dissolve
Water	5·0 mils	
Sulphuric acid	1·5 mils	mix and cool
Water	6·0 mils	
Isopropyl acohol	4·0 mils	

The yield of nitrite was 4 mils, which, made up to 100 mils as before, assayed 16.2 mils nitric oxide. Further experiments were carried out using measures of different sizes, the product in each case being diluted with isopropyl alcohol to give a 4 per cent. v/v solution, and assayed. Results, given in tabular form, indicated that the sample of isopropyl nitrite first prepared was not pure, so 100 mils were washed with five successive quantities of water to remove alcohol. The volume of the aqueous alcoholic layer at each separation was (*a*) 68 mils; (*b*) 62 mils; (*c*) 55 mils; (*d*) 53 mils; (*e*) 50 mils. Therefore approximate volume of alcohol removed = 288-250 mils = 38 mils. The ester was then dried over calcium chloride; sodium bicarbonate added to neutralise acidity, and powdered gum tragacanth added to remove final traces of water; filtered and distilled. The boiling range was 39.5° to 41° C.; the bulk distilling between 39.5° and 40° C. S.g. 15.5°/15.5° C., 0.8684. Solubility in water 1 volume in 105 volumes. Four solutions, 4 per cent. v/v in isopropyl alcohol assayed (1) 16 mils; (2) 15.4 mils; (3) 16 mils; (4) 16 mils of nitric oxide. A sample of isopropyl nitrite stored between 13° and 22° C. in a stoppered amber bottle kept perfectly during six weeks.

Discussion

Dr. Hampshire said he had written to the author pointing out that he saw in the paper an objection on the ground that it recommended substitution for sweet spirit of nitre. The appearance of the paper in the Conference proceedings, he stressed, should not be taken as sanction for such substitution. Mr. Brown had sent him a résumé of what was to be found in the general works on the subject. The general statement was that the nitrites resemble one another in action. They should know the action of isopropyl nitrite before they considered extemporaneous methods of preparation.

Mr. Jones pointed out that isopropyl alcohol, when nitrated, was not a nice substance. If isopropyl alcohol was warmed with nitric acid and in the presence of silver, isopropyl cyanide was formed.

Dr. Crossley-Holland welcomed the remarks of the previous speakers. Until the pharmacological effect of the proposed substitution for ethyl nitrite was known it could well be a source of danger. It might be that isopropyl nitrite would have the effect of untowardly reducing blood pressure, and while the paper showed careful work it should be accepted with conservatism until the points discussed had been cleared up.

The next paper was also read by Mr. Boyes, the subject being

Propylene Glycol as a Pharmaceutical Solvent

By C. L. M. Brown

[Abstract]

The development of glycols as solvents for lacquers and dyestuffs has proceeded rapidly during the last few years, but their use for pharmaceutical purposes has been almost ignored. Propylene glycol has been investigated from a solvent standpoint as it is less toxic than ethylene glycol, being probably innocuous. The author stresses the possibility of toxic effect of glycol solvents owing to production of poisonous diethylene oxide after ingestion. Ethylene glycol very probably gives rise to diethylene oxide in the human body. Four glycol type solvents of commercial origin were purified by dehydration (over calcium chloride) and subsequent distillation twice (the first time under slightly reduced pressure). The boiling points and densities of the purified products were as follows:—

—	B.pt.	Density
Ethylene glycol	197° C.	1·117 (15·5°)
Diethylene glycol monoethyl ether ...	197° C.	1·033 (15·5°)
Propylene glycol	188° C.	1·040 (20°)
Glycerol triacetate	257° C.	1·166 (15·5°)

The properties of propylene glycol ($CH_3.CH(OH).CH_2(OH)$) were ascertained as follows:—

Solubility of Propylene Glycol in Other Solvents

Water. Miscible in all proportions, with slight rise in temperature. It was found impossible to "salt out" the glycol; on the contrary, the addition of the glycol to a saturated salt solution caused separation of salt crystals.

Acetone. Miscible in all proportions. Addition of water causes no separation.

Ether. Soluble 1 volume in 9 volumes (Thorpe gives the solubility as 1 volume in 12 to 13 volumes). Five mils was dissolved in 45 mils of ether and water added progressively; 1 mil of water caused separation into two layers, the lower layer (glycol) measuring 4 mils, 2 mils caused separation of a lower layer of 5 mils, and 10 mils caused separation of a lower layer of 15 mils (i.e., apparently complete separation).

Chloroform. Miscible in all proportions. Five mils was dissolved in 45 mils of chloroform and water added; 1 mil caused separation into two layers, the upper layer (glycol) measuring 5½ mils, 10 mils caused separation of an upper layer of 15 mils (i.e., apparently complete separation).

Alcohol. Miscible in all proportions. Water causes no separation.

Petroleum spirit (b.pt. 40° to 60° C.). Immiscible.

Solubility of Alkaloids in Propylene Glycol

Atropine. Required gentle heat to effect solution. Neither cooling nor dilution with water caused reprecipitation of the alkaloid.

Atropine sulphate. Similar to atropine.

Codeine. Required gentle heat to effect solution. No precipitation on cooling or dilution with water.

Ephedrine. Readily soluble on warming. Could be freely diluted without separation.

Homatropine. Required gentle heat to effect solution. No precipitation on cooling or dilution with water.

Homatropine hydrobromide. Similar to homatropine.

BRITISH PHARMACEUTICAL CONFERENCE 1935

Quinine sulphate. Required gentle heating to effect solution. No precipitation on cooling, but precipitation occurred on the addition of an equal volume of water.

Strychnine. Required heating to 90° C. to effect solution. No precipitation on cooling. Precipitation occurred on the addition of an equal volume of water.

Strychnine hydrochloride. Required heating to 40° C. to effect solution. No precipitation on cooling or on dilution with water.

A 2 per cent. w/v solution in propylene glycol was tested with the following alkaloidal reagents:—

(*a*) *Sodium carbonate solution* (saturated). No precipitation until diluted with water.

(*b*) *Mayer's reagent.* Immediate precipitate.

(*c*) *Picric acid solution* (saturated). A precipitate formed which immediately redissolved. A positive reaction was obtained on dilution with an equal volume of water.

(*d*) *Tannic acid solution* (saturated). No precipitate was obtained even on extreme dilution with water. An aqueous solution of strychnine hydrochloride precipitated with tannic acid solution was easily cleared by the addition of a few drops of propylene glycol.

To 90 mils of a saturated solution of strychnine hydrochloride 10 mils of tannic acid solution 10 per cent. w/v was added and then propylene glycol from a burette, until the solution cleared; 9 mils was required; therefore the final concentration of propylene glycol was 8.25 per cent. w/v.

SOLUBILITY OF INORGANIC SUBSTANCES IN PROPYLENE GLYCOL

Iodine. Soluble on gentle warming.

Ferrous sulphate. Slight.

Sodium chloride, Potassium bromide, and *Potassium iodide.* Appreciable.

Sodium bicarbonate. Slight.

Sodium carbonate, anhydrous. Insoluble.

Sodium phosphate. Insoluble.

SOLUBILITY OF ORGANIC SUBSTANCES IN PROPYLENE GLYCOL

Oleic acid. Miscible in all proportions. Separation occurred immediately on the addition of water.

Tannic acid. Very soluble on gentle warming. Ferric ions (ferric chloride) added in propylene glycol gave a blue-green colour, which on dilution with water gave a blue-violet colour.

Silver proteinate. Hardly soluble; readily coagulated on gentle warming.

Mild silver proteinate. Slowly soluble, more readily on gentle warming, forming an opaque solution with a slight green fluorescence.

Cresol B.P. Soluble in all proportions. Poured into water, the cresol separated in oily globules.

Liquid paraffin B.P. Immiscible.

Phenol B.P. Easily soluble in the cold by shaking well.

Phenolphthalein. Required gentle warming to effect solution. Five grams in 100 mils required 150 mils of water to cause precipitation. A solution made as follows remained clear:—Phenolphthalein, 1 gr.; propylene glycol, 80 min.; water, to 240 min.

DYES

Bordeaux B, readily soluble. *Brilliant green,* readily soluble. *Methylene blue* (medicinal), readily soluble, giving a deep purple solution. *Orange G,* readily soluble. *Caramel,* miscible all proportions. *Tartrazine,* readily soluble. *Trypan blue,* readily soluble. A concentrated solution was purple, a dilute solution blue.

CONCENTRATED SOLUTIONS FOR SYRUPS (1-7)

Horehound. Virginian Prune. Buckthorn. Rhubarb. Red Poppy. Squill. All were miscible in all proportions. Simple syrup was also miscible in all proportions.

FIXED OILS

Arachis, Linseed, Olive, immiscible, and *Persic oils,* immiscible.

Castor oil, partly miscible, especially at high temperatures (i.e., almost boiling).

VOLATILE OILS

In each case 1 mil of the oil was made up to 30 mils with propylene glycol and water added from a burette until the "cloudiness" was equal to that of the standard. The "standard cloudiness" was prepared as follows:—Oil of bitter almond without hydrocyanic acid, 1 mil; Propylene glycol, 22 mils; Water No., 66 mils. The quantities of water required to produce the standard cloudiness were:—*Oil of bitter almond without hydrocyanic acid,* 36 mils. *Oil of dill,* 1 in 30 in propylene glycol was cloudy. *Oil of cajuput,* 2 mils. *Oil of caraway,* 3 mils. *Oil of clove,* 4 mils. *Oil of cassia,* 5 mils. *Oil of cinnamon,* 5 mils. *Oil of coriander,* 5 mils. *Oil of eucalyptus,* 5 mils. *Oil of lemon,* 1 mil. (1 in 30 in propylene glycol was slightly cloudy.) *Oil of peppermint* (American), 4 mils. *Oil of nutmeg,* 1 mil. (1 in 30 in propylene glycol was slightly cloudy.) *Oil of turpentine,* quite immiscible.

TINCTURES

Tincture of cinchona (70 per cent.), slight precipitate when prepared. Filtered. Remained clear.

Tincture of colchicum (60 per cent.), clear when prepared but precipitated slightly in twenty-four hours.

Tincture of hyoscyamus (70 per cent.), clear when prepared, but precipitated in twenty-four hours.

Tincture of ipecacuanha (90 per cent.), immediate precipitate. Remained perfectly clear with 100 per cent. propylene glycol.

Tincture of nux vomica (60 per cent.), clear when prepared, but precipitated in twenty-four hours. Filtered; no further precipitation occurred.

Tincture of senega (60 per cent.), clear when prepared, but slight precipitate in twenty-four hours. Filtered; no further precipitation occurred.

Weak tincture of ginger, clear only in 100 per cent. propylene glycol. A slight precipitate occurred after three days.

MISCELLANEOUS

Acacia. Insoluble. Useful for the extemporaneous preparation of mucilage of acacia (half strength). Powdered acacia 4 grams, propylene glycol 6 mils. Shook together well in a *dry* bottle; added 6 mils of water, and shook well.

Wool fat. Immiscible.

Extract of male fern. Partly miscible. The oily globules were filtered out and shaken with more solvent; no further solution occurred. Addition of water to the filtrate produced a milky emulsion.

Tragacanth. Insoluble. Propylene glycol was substituted for ethyl alcohol in mucilage of tragacanth with success.

Spirit of nitrous ether. A solution was made by suitably diluting a liquor concentrated 1-7 with propylene glycol and tested at intervals. A control from the same liquor made with rectified spirit was stored under the same conditions and tested at the same times. The results (given in tables) show that propylene glycol considerably retards the volatilisation of ethyl nitrite and may conveniently replace ethyl alcohol in sweet spirit of nitre. The author acknowledges the help of Mr. E. A. Lunn in searching through the literature, and thanks Blackwell, Hayes & Co., Ltd., for the use of their laboratory.

DISCUSSION

DR. HAMPSHIRE said he had asked the author for information regarding the pharmacological effects of glycols and Mr. Brown had drawn attention to his warning on the toxicity. Dr. Hampshire thought at the present stage of knowledge it was unwise to start using these solvents medicinally.

MR. WALMSLEY said the idea of glycols was being put forward by the manufacturers, but he said he would be chary of introducing them to medicine.

The next paper was read by Mr. Boyes on

The Melting Point of Chloral Formamide

BY C. T. BENNETT AND N. R. CAMPBELL

[ABSTRACT]

CHLORAL FORMAMIDE is described in the British Pharmaceutical Codex, 1934, as the product obtained by gently heating chloral and formamide in molecular proportions and allowing the product to set to a solid mass. The melting point is given as between 114° and 115° C., and it is given by Richter as

BRITISH PHARMACEUTICAL CONFERENCE 1935

115° to 116° C. During several years, samples of this product have been examined in the analytical laboratory of Wright, Layman & Umney, Ltd. The following points have been observed:—(1) The samples had invariably a faint yellow colour. (2) In practically all cases the material possessed a marked odour, resembling that of chloral hydrate. (3) The melting points showed some surprising deviations from the standards. In the course of about four years, twenty-six samples have been tested, and of these one melted at 114°, eight at 115°, three at 116°, three at 117°, four at 118°, four at 119°, one at 120°, one at 122°, one at 125°. These melting points were determined by a number of operators, using apparatus of the type described in the British Pharmacopœia, 1932. The specimen mentioned above as melting at 125° C. was recrystallised from alcohol (30 per cent.), with observation of the instructions of the Codex. The product was odourless, and only very faintly yellow. The melting point remained 125°. We prepared two small quantities of the material, using chloral of our own production from chloral hydrate and commercial formamide. The mass in one case was broken up, coarsely powdered, and washed with water. On drying between filter papers, the product had a distinct odour of chloral and melted rather indefinitely over the range 115° to 120° C. Another operator gave the melting point as 118° C., using the official apparatus. This product (*a*) was then recrystallised from water and after drying, melted fairly sharply at 126° C. The crystals were small, bright, and quite free from odour or colour. The product (*b*) was recrystallised from alcohol (30 per cent.), and although its appearance was slightly inferior to that of (*a*) it was odourless and melted at 126° C. Two further quantities of chloral formamide were next prepared, (*c*) containing excess of chloral and (*d*) excess of formamide. On washing with water and drying between filter papers, (*c*) melted at 115° C. and (*d*) at 116° C., both possessing a marked odour of chloral hydrate; (*c*) was recrystallised from alcohol (30 per cent.) and then melted at 124° C. The recrystallised product (*a*) was found by an independent observer in another laboratory to melt at 124° C. After describing further experiments, the authors suggest that the recorded melting points represent the temperature of sintering. This cannot be termed the melting point for practical purposes since, even if solid and liquid were present and in equilibrium, the liquid would not be visible to an observer. It must be remarked that in the cases of solids which sinter well below the melting point and which decompose a few degrees above complete liquefaction the melting point may be of doubtful significance. The authors consider, however, that the melting point of chloral formamide is sufficiently definite to be of use, and point out the possibility of recorded melting points having been determined on impure material. No commercial specimen of m.p. 114° to 116° C. has been available of late.

They therefore suggest that the melting point of chloral formamide, as given in the British Pharmaceutical Codex, 1934, is not in accordance with experiment, and that it would more correctly be recorded as 124° to 126° C. with limits for pharmaceutical purposes between 122° and 126° C.

Discussion

Mr. Powell said he found the melting point falls into one of two groups:—114-116° and 119-120°.

The next paper, which was read by Mr. A. J. Jones, was on

The Assay of Quinine in Iron and Quinine Citrate

By J. S. Toal and A. J. Jones

[Abstract]

In this investigation the starting point was the finding by the authors that the assay of quinine by weight always gives a higher figure than the titratable value and that no constant ratio obtains between the two results. Experiments show that the inconsistencies are due to retention of water and/or solvent, and, in particular, to decomposition of quinine alkaloid. There are two phases of this loss of basicity, one occurring during scaling and the other (possibly) in the course of assay. Tests on pure quinine alkaloid show that dehydration can be effected within two hours at 100° C. in an inert atmosphere of carbon dioxide, but heating beyond two hours involves loss of basicity without change in weight. Exposure to air accentuates decomposition, which is accompanied by discoloration.

In commenting upon the B.P. assay for quinine in iron and quinine citrate, the authors point out that if standardisation by weight is to be retained it is important that there should be no difference between titration and weight values. Though these agree with the liquor prior to scaling, there is a distinct difference after scaling. Ether extraction (as in the B.P. assay) gives results nearer the truth than when chloroform is used. To facilitate dehydration of alkaloid it is suggested that the solvent (whether ether or chloroform), containing the extracted alkaloid should be filtered into a carbon dioxide flask, followed by evaporation to dryness on a water bath. The residue is then treated with from 2 to 3 mils of absolute alcohol, which (on re-evaporation to dryness) enables the removal of the last traces of moisture and solvents within two hours (without decomposition of quinine alkaloid). The time for drying to constant weight should not be more than two hours at 100° C., as longer exposure causes loss of basicity.

The table (slightly condensed in this abstract) gives comparative results of assays of twelve different samples of iron and quinine citrate, and shows the variation between the three types of chloroformic extraction when conducted on the same specimen of scale preparation. Columns 2 and 3 should be taken together and compared with columns 4 and 5. The degree of decomposition following upon drying to constant weight is illustrated by the difference between columns 3 and 1. Comparison of columns 5 and 1 indicates that prolonged drying causes loss of basicity in the case of those residues (marked with an asterisk) purposely heated for periods of four to six hours. Samples 8 and 12 were also assayed with ether as extraction solvent, the loss of basicity being the same as with chloroform. It is pointed out that a certain amount of decomposition ensues naturally during manufacture, and that the margin allowed in the Pharmacopœia (14.5 to 15.5 per cent. of anhydrous quinine) appears to be practical and sufficient to cover losses in manufacture and analytical errors. The authors suggest that the standard might be modified to " not more than 15.5 per cent. as determined by weight and not less than 14.5 per cent. as determined by titration." The object is to ensure that the lower limit is a limit for alkaloid and not for a partially decomposed product.

Sample No.	Chloroform evaporated from water bath and titration (1)	Constant weight in oven at 100° C. from chloroform (2)	Titration value of (2) (3)	Weight after 2 hrs. at 100° C. from chloroform and alcohol (4)	Titration value of (4) (5)
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1	14·58	15·16 (*c* 103° C.)	14·38	—	—
2	14·64	—	—	15·2	14·64
3	14·51	—	—	14·6	14·26*
4	14·77	15·24	14·64	14·96	14·58*
5	14·86	15·36	14·77	15·16	14·86
6	14·64	15·16	14·44	14·88	14·58
7	14·84	15·44	14·71	15·04	14·53*
8	14·38	14·80	14·26	14·6	14·38
9	14·58	15·16	14·58	15·04	14·58
10	14·64	15·2	14·64	15·12	14·64
11	15·16	15·56	15·03	15·24	15·03*
12	15·04	15·24	14·92	15·20	15·04

* These assays were heated over periods of four to six hours.

(From the laboratories of Evans Sons Lescher & Webb, Ltd.)

Discussion

Professor Small asked what was meant by basicity in quinine.

Mr. Jones replied that he meant the basic value of quinine as titrated by acid.

In the absence of the authors Dr. Hampshire read an abstract of the following paper:—

Alcohol Content and Specific Gravities of the Tinctures of the British Pharmaceutical Codex, 1934

By C. T. Bennett and F. C. L. Bateman

[Abstract]

In the British Pharmaceutical Codex, 1934, limits are given for the alcoholic content of tinctures, following the lead of the British Pharmacopœia. As these limits may be used as legal

BRITISH PHARMACEUTICAL CONFERENCE 1935

standards it is desirable that they should be in accordance with samples prepared on a manufacturing scale. The figures recorded in the authors' table have been obtained, in the analytical laboratory of Wright Layman & Umney, Ltd., on samples carefully prepared and tested by the official methods, and the results may be of interest to manufacturing pharmacists and others. The alcohol content of the majority of these tinctures comes well within the limits allowed by the British Pharmaceutical Codex, and in most cases approaches the higher limit. There are a few cases in which it appears that the lower limit should be raised. In many cases the proportion of moisture present in the drug used has of course a direct bearing upon the alcohol content of the finished tinctures, and for this reason tinctures prepared from different samples of the same drug may show variations in the final content of alcohol, although prepared in precisely the same manner and under the same conditions. In the authors' opinion the figures for the following should be altered as indicated:—

—	B.P.C. 1934 per cent. v/v	Suggested limits per cent. v/v
Tinctura Chloroformi composita...	62 to 65	64 to 67
„ Cinnamomi composita	55 to 59	57 to 59
„ Ergotæ ammoniata	51 to 54	50 to 52
„ Ferri perchloridi	22 to 24	21 to 23
„ Gallæ	53 to 57	52 to 56
„ Kino	44 to 48	46 to 50
„ Lavandulæ composita	86 to 89	88 to 90
„ Myrrhæ composita	61 to 65	63 to 67
„ Opii ammoniata	63 to 68	64 to 67
„ Podophylli	85 to 88	86 to 88

There was no discussion.

The next paper, read in abstract by Mr. R. R. Bennett, was on

The Use of Rabbits in the Assay of Digitalis, Strophanthus and Squills

By G. N. Rapson and S. W. F. Underhill

[Abstract]

The practicability of using rabbits for the assay of digitalis was investigated owing to the fortuitous circumstance that a stock of animals was readily available. It was found that the use of rabbits is less time-consuming than is the case with cats, but that the greater resistance of rabbits to the toxic effects of the drugs tends to a decrease in accuracy unless there is a rigid adherence to the proper conditions, especially the time taken to kill an animal of average weight. The method adopted includes the solution of the cardiac principle being infused by means of a cannula inserted into the external jugular vein at a constant temperature (40° C.), arrest of the heart being determined by palpation and auscultation of the chest. The rate of infusion of the drug must be maintained at a constant rate.

Strophanthus.—The tincture is diluted with 0.9 per cent. sodium chloride solution. From the results of a series of tests using different concentrations and rates of infusion, the following conclusions are arrived at:—(1) The rate of infusion should be not greater than 1.2 mil per minute; (2) the time to kill a 2-kilo. rabbit should be between twelve and thirty minutes; (3) under these conditions the amount infused lies between 7 and 15.9 mils per kilo. The mean lethal dose (from four tests) of British Standard tincture of strophanthus was 0.0199 mil per kilo, with a standard deviation of 0.0009.

Ouabain.—The most consistent results from several tests on International Standard ouabain were obtained with a solution of concentration of 0.001 to 0.0012 per cent. The mean lethal dose for thirty-four animals was 0.0935 mgm. per kilo., with a standard deviation of 0.0046.

Strophanthin.—British Standard solution of strophanthin was tested, one mil of which contains the equivalent of 5 mgm. of standard strophanthin. The rate of infusion was 1 mil per minute, and the time to kill between 14.8 and 15.7 minutes. The mean lethal dose (on sixteen animals) was 0.1715 mgm. per kilo, the standard deviation being 0.0114. The potency of British Standard tincture of strophanthus works out at almost 17 per cent. stronger than the figure given by the frog method. International Standard strophanthin tests 14 per cent. stronger with rabbit assay than by the frog method. The difference is probably due to a combination of errors but may possibly result from differences between the two species in their relative responses to strophanthin and ouabain.

Digitalis.—Owing to the relative insensitivity of rabbits to digitalis, attempts were made to prepare strong solutions, but difficulties arose through precipitation of active principles. Finally the rate of infusion was increased, and this proved satisfactory. Tinctures are prepared for test by evaporation on a water bath to half volume and the concentrate diluted as required with 0.9 per cent. sodium chloride solution. Preliminary tests on powdered leaf of *Digitalis lanata* (with potency of 294 per cent. compared with International Standard powdered digitalis) showed that a dilute solution (0.5 per cent.) infused at 2 mils per minute gave the most satisfactory results provided death occurs within seven to twenty-seven minutes. The mean lethal dose of *Digitalis lanata* powder was 0.0694 gm. per kilo, and its standard deviation was 0.0030.

It was concluded from tests on British Standard powdered digitalis that the concentration of solutions of *Digitalis purpurea* should be 1.2 to 1.8 per cent., with a rate of infusion of 1.5 to 2 mils per minute. The average amount infused should lie between 12 and 19.7 mils per kilo, and the time to kill between fifteen and twenty-five minutes. Weak tinctures give less accurate results than strong tinctures, and slow rates of infusion tend also to inaccuracy, so that the above conditions must be rigidly followed to obtain reasonably accurate results.

Squills.—The required conditions appear to be similar to those for strophanthus and digitalis, i.e., a rate of infusion between 1.1 to 1.9 mil per minute, and duration of experiment from fifteen to twenty-five minutes. A standard tincture of squill possessed a mean lethal dose of 0.6155 mil per kilo, and a tincture prepared by the authors had a potency of 111 per cent. of this standard. Accurate results may be expected with commercial tinctures when diluted 1 in 20 provided the potency lies between 80 and 110 per cent. of standard.

In discussing the results of the rabbit tests on glycosides it is calculated that the number of animals required to bring the standard deviation within the B.P. requirement of 10 per cent. would be:—Tincture of strophanthus, 6 to 7; ouabain, 9; strophanthin, 12 to 13; tincture of digitalis, 10; and tincture of squill, 9. The rabbit has been found to be less sensitive than the cat to ouabain, strophanthus or squill, but more sensitive than the dog or guinea-pig to the two former. On the other hand the resistance of the rabbit to the lethal action of digitalis exceeds that of the other three species, which accounts for the greater variability of the results of digitalis assays on rabbits. Rabbits are preferred by the authors to cats because the duration of each experiment is approximately halved. The average lethal doses of the different species for the four kinds of animals are compared in the following table:—

	International standard ouabain mgm. per kgm.	Tincture of strophantbus mils per kgm.	International standard digitalis gm. per kgm.	Tincture of squill mils per kgm.
Cat	0·076–0·104	0·02 –0·0025 0·016–0·02	0·076 0·09 0·11	0·45
Rabbit	0·094	0·0199	0·233	0·62
Dog	0·169	0·04	0·198	—
Guinea-pig ...	0·2	0·06 –0·08	0·13–0·15 0·2	—

The results obtained by assays with rabbits appear to agree well with those given by cats in the case of strophanthus. Digitalis tincture of 100 per cent. standard tested on rabbits 86 ± 11 per cent. Digitalis powder of 156 per cent. standard yielded with rabbits a figure of 146 ± 14 per cent., and another sample of 120 per cent. standard tested 121 ± 10 per cent. In parallel tests with a tincture of squills, the potency with cats was 123 per cent., and figures of 93 and 116 per cent. were obtained with two different series of tests on rabbits. The authors thank the directors of The British Drug Houses, Ltd., for permission to publish the paper.

Discussion

The Chairman said the paper was of exceptional interest, and should be read carefully. Any experiments with a view to more exact presentation of digitalis, strophanthus and squill were very important.

BRITISH PHARMACEUTICAL CONFERENCE 1935

The final paper at the afternoon session was read by Mr. R. R. Bennett and dealt with

The Œstrogenic Activity of Cows' Urine

By M. M. O. Barrie, J. B. E. Patterson and S. W. F. Underhill

[Abstract]

An investigation of the œstrogenic activity of the urine of cows was made at successive stages of pregnancy, the object being to ascertain whether, at some stage of pregnancy, it might provide suitable material for commercial extraction of œstrone, as supplies are readily obtainable. The results of the biological assays on spayed mice show that œstrogenic activity was not detectable during the first twenty-one weeks of pregnancy, the amount of hormone present being less than 50 to 100 units per litre. The œstrogenic activity of the cows' urine rose to about 700 units per litre at the thirtieth week of pregnancy and to nearly 9,000 units in the thirty-second week, falling to 4,000 units during the thirty-fourth week. The activity attained 17,000 units per litre in the last (37th) week of pregnancy, but the amount of urine collected was small (1.5 litre) and proportion of solids high. The variations in œstrogenic activity of cows' urine during the last seven weeks of pregnancy are probably explainable by variations in the concentration of the urine, the figures for extractable solids bearing this out.

Discussion

The Chairman said this was valuable work of the newer type. The authors had made out a good case for their conclusions and the paper would go on record as a desirable contribution to an important medical subject.

Dr. Corran called attention to the parallelism between the œstrogenic factor and the other hormone which occurs in the urine of pregnant animals, and asked if any information was available regarding variations during different times of the day.

Mr. D. J. Williams called attention to the drop in the thirty-fourth week.

Mr. Bennett said, so far as he was aware, no information was available regarding daily variations. The drop during the thirty-fourth week was, he believed, quite correct and also occurred in other pregnant animals.

This concluded the afternoon session.

SCIENCE SESSION

Wednesday Morning

The Wednesday morning session, under the chairmanship of Dr. Crossley-Holland, commenced with a paper (read, in the absence of the author, by Mr. R. R. Bennett) on

The Deterioration of Atropine Eye Ointments on Storage

By Noel L. Allport

[Abstract]

Finding that a sample of yellow eye ointment with atropine B.P.C., 1923, had lost some of its activity three weeks after manufacture, the author was led to make further tests, which showed that a rapid loss of alkaloidal strength occurs on keeping this preparation. Thereon it was decided to make a thorough investigation, not only of this, but of other eye ointments containing atropine, with a view to determining the effect of storage on their alkaloidal content. Batches of the following five ointments were made:—Atropine eye ointment B.P.C., 1923 ; yellow eye ointment with atropine B.P.C., 1923 ; atropine eye ointment B.P., 1932 ; eye ointment of atropine with mercuric oxide B.P., 1932 ; iodoform and atropine eye ointment B.P.C., 1934. Each ointment was made strictly in accordance with the published formula and was at once divided into three parts. One part was packed in glycero-gelatin capsules, another in collapsible tubes made of pure tin, and the remainder kept in an earthenware jar. Each ointment was assayed for alkaloidal content immediately after packing, and henceforth the concentration of atropine under the different conditions of storage was determined at intervals during a period of 189 days. The method of assay employed was the same for all the preparations except that the quantity of ointment used for the assays was varied to suit the expected alkaloidal strength. The procedure is given and the results obtained are summarised. It is apparent that all the preparations lost strength during the period of observation, although the rate of deterioration varied considerably. The author deals with each ointment separately, and graphs show the fall in alkaloidal concentration on storage of atropine eye ointment, B.P.C., 1923, yellow eye ointment with atropine, B.P.C., 1923, and eye ointment of atropine with mercuric oxide, B.P., 1932, respectively. There is also a table showing the effect of storage on the alkaloidal content of atropine eye ointments. It is demonstrated that all the atropine eye ointments examined became weaker in atropine after storage. Ointments containing atropine base, with or without mercuric oxide, deteriorated most rapidly when stored in glycero-gelatin capsules. Glycero-gelatin does not accelerate the deterioration of ointments made with atropine sulphate. Yellow eye ointment with atropine, B.P.C., 1923 loses alkaloidal strength rapidly. The alkaloidal content of eye ointment of atropine with mercuric oxide, B.P., 1932, falls to about four-fifths of its original value in about a month and then remains nearly constant for a considerable time. The alkaloidal strength of iodoform and atropine eye ointment, B.P.C., 1934, was well maintained during the period of the observations. (From the laboratories of The British Drug Houses, Ltd., whose directors are thanked for permission to publish results.)

Discussion

The Chairman said Mr. Allport was to be congratulated on this work. The deterioration of preparations such as those dealt with in the paper was a matter to be taken very seriously. He would have liked to have seen some constructive suggestions as to better means of storage. Atropine eye ointment with mercuric oxide was a preparation which might rapidly deteriorate in any circumstances.

Mr. Boyes asked if information was available regarding possible deterioration of the atropine base during the preparation of the ointment.

Dr. Hampshire asked what became of the atropine during decomposition.

Mr. Walmsley, with reference to previous work on the subject, said Mr. Franklin suggested that atropine migrated from petroleum jelly to the envelope of the capsule. Mercuric oxide was sensitive to light, and on exposure discoloured in a few minutes. He asked how the authors had treated the subject with regard to light.

Dr. Corran referred to Table 1, and said that in the two ointments containing mercuric oxide the percentage loss over 189 days was greatest. Was anything known of the effect of mercury on the loss of atropine?

Mr. Jones said there appeared to be some relation between mercuric oxide and the reaction. When atropine sulphate was alkalised for a few moments alkali was used up and the amount of alkaloid left in solution was slightly decreased.

Mr. Bennett, in reply, said the author was continuing this work. They ought to be able to find out what happened to the alkaloid. The ointments were asssayed immediately after they were made, so that the alkaloid was not destroyed during the preparation of the ointments.

The next paper was also read by Mr. Bennett, and dealt with

An Improved Method for the Estimation of the Essential Oil Content of Drugs

By T. Tusting Cocking and G. Middleton

[Abstract]

It is generally recognised that the best available method for the determination of essential oils in drugs and spices lies in the use of a continuous distillation apparatus in which the drug is distilled in steam and the condensed water, separated from the oil, is returned to the distilling flask, the amount of oil obtained being measured at the end of the operation. The objections to this apparatus were removed in an apparatus designed by the authors and constructed in one piece. The results obtained with this apparatus over a long period have

BRITISH PHARMACEUTICAL CONFERENCE 1935

shown that in principle it is fundamentally sound, but for routine testing a simplified form of apparatus is to be recommended. The modified apparatus is shown by means of a diagram and its operation explained.

Though it would appear at first sight that drugs should be powdered before distillation in order to break open the oil-containing cells and liberate the essential oil, it has been shown that in some cases higher yields are obtained when the material is distilled whole. A table is given showing the results obtained from material in the whole state and after passing through a coffee grinder, distillation being continued in each case until the volume of oil was constant. A second table summarises the conditions which the authors have found most satisfactory for the distillation of a number of drugs and spices, while a third table shows the amount of essential oil yielded by a number of samples of drugs, herbs and spices. A considerable variation has often been found in the amounts of oil yielded in those cases in which a number of samples have been examined. The necessity of fixing minimum limits for the yield of the essential oil in such drugs is thus indicated. (The work entailed was carried out in the laboratories of The British Drug Houses, Ltd.)

Discussion

The Chairman described this as a painstaking work, and he thought the results in the tables would become standards for all interested.

Mr. Short said in his experience with the author's original apparatus he had found difficulty in reading the volume of oil in the narrow tube. He also criticised the apparatus so far as its length is concerned, the difficulty of cleaning and costliness in event of breakage.

Mr. Meek was of the opinion that the apparatus was an excellent one, but he thought the taking of such small quantities of drug might introduce a factor of error. He agreed with Mr. Short as to the cost and also advocated a wider graduated tube. Control of heating was another important factor. The use of turpentine he thought was excellent ; he had used xylol. As regards the state of the sample by testing, his experience showed that every drug needed to be taken on its merits—it was a big question to find the optimum state. His own figures agreed with those of the author, but he preferred saturated brine, which not only gave somewhat better figures but also prevented charring.

Dr. Hampshire spoke of the difficulty of fixing a limit for essential oil in drugs and of finding a type of apparatus which everyone would use. Small-scale distillation usually gave different figures from those obtained on a manufacturing scale.

Mr. Short said he had achieved very similar results from small-scale tests and in the still-yard.

Mr. Bennett briefly thanked those who had taken part in the discussion.

The next paper, read by Dr. Hampshire, was on

The Relative Merits of Maceration and Percolation for the Preparation of Tincture of Digitalis

By H. Berry and H. Davis

[Abstract]

This investigation was carried out at the request of the British Pharmacopœia Commission in order to ascertain if it would be possible to substitute the process of maceration for percolation in the preparation of tincture of digitalis and thus simplify the extemporaneous preparation of small quantities. The same sample of standardised powdered leaf was used throughout. The maceration tinctures were prepared by adding 100 mils of the menstruum (70 per cent. alcohol) to 10 gm. of the leaf (in moderately coarse powder) in a wide-mouthed bottle, shaking at definite intervals, lightly pressing the marc and filtering, but making no adjustment to volume. An average yield from 100 mils of menstruum was 90 mils of macerate. The percolation tinctures were made by the official method using 10 gm. of leaf and producing 100 mils of percolate. In the case of the maceration tinctures, the marc would be left wetted with the solution, whilst in the percolation tinctures all the active principles should pass into the percolate. After discussing the results of their experiments (illustrated with six tables) the authors conclude that the full activity of digitalis leaf is readily extracted by a maceration process, a period of two days with occasional shaking being as effective as the official percolation process, although the latter gives a higher total solids figure. As percolation can yield varying results in the hands of different workers, particularly on a small scale, it is suggested that the official process should be changed to the simpler process of maceration, which would facilitate the preparation of small quantities of the tincture. (From the Pharmacy Research Laboratories of the Pharmaceutical Society of Great Britain and the University College Hospital.)

Discussion

The Chairman said the paper was both interesting and useful. It was evidently found that maceration could be substituted for percolation in the preparation of these drugs. Time was valuable in preparation, and although total solid extracted by maceration was less, the activity was the same. In this instance the absence of a portion of the extractive did not apparently affect the activity. A shorter process of maceration would be welcomed.

Mr. Brindle said the paper was a valuable piece of work and deserved the thanks of all pharmacists. The method might be extended to other drugs. He was sure a welcome would be offered to greater use of maceration in the tinctures of the Pharmacopœia in place of percolation. He suggested that it might be mentioned to the Pharmacopœia authorities that both processes be used.

Dr. Hampshire said the authorities were proceeding on those lines.

Mr. Powell said the amount of deposition of macerated tincture was double that of tincture by percolation. He assumed that the tinctures prepared in later series showed some deposition. He asked if the tinctures prepared by maceration were clear. The figures suggested that deposition was quickly over.

A member asked if results obtained by maceration would require to be biologically standardised.

Dr. Hampshire said biological standardisation was not necessary.

The paper which followed related to

Emulsions

By J. B. Parke

[Abstract]

An emulsion may be defined as a system containing two liquid phases, one of which is dispersed as globules in the other. Ostwald, in what is now known as the phase-volume theory of emulsions, suggested that it is impossible to obtain an emulsion containing more than 74.048 per cent. by volume of disperse phase. On an attempt being made to increase the oil content of, say, an oil-in-water type of emulsion by the addition of more oil, Ostwald's theory pictures a change of type. Bancroft points out that both the assumptions underlying the phase-volume theory are far from correct.

The following experiments were carried out by the author:—

225 c.c. of A.R. benzene containing 2,319 gm. of oleic acid and 25 c.c. of water containing 0.329 gm. of sodium hydroxide were placed together in a glass-stoppered bottle of 8-oz. capacity. The mixture was shaken by hand. The rest interval adopted was one minute, and emulsification was found to be complete after fourteen minutes. A very stable emulsion of the water—continuous type—containing 2.5 gm. of sodium oleate was thus produced. Microscopic examination revealed that the globules of disperse phase in this emulsion were not of uniform diameter, and that smaller globules were packed into the interstices between the larger. The emulsion was homogenised, and it was found that partial decomposition resulted. The mixture delivered by the homogeniser consisted of clots of a water-continuous type of emulsion distributed throughout a considerable excess of benzene. These clots quickly coalesced to form a layer at the bottom of the mixture. The lower layer of emulsion was run off from the free benzene by means of a separating funnel, and the percentage of benzene in this emulsion was determined by

"breaking" a known quantity with dilute hydrochloric acid in a burette and found to be 72 per cent. by volume. (The results obtained from this and three other emulsions stabilised by sodium oleate are shown in a table.) When the emulsions produced by homogenisation were examined under the microscope they were seen to contain very small globules of practically uniform diameter. Emulsions containing less than 72 per cent. by volume of benzene or less than 70 per cent. by volume of toluene did not show any tendency to decompose on being passed through the homogeniser, but in every case an emulsion of greatly enhanced stability was produced. It was observed that when an emulsion had been partially broken by homogenisation the content of oil in the new emulsion could only be increased by adding the oil very slowly, about one c.c. at a time, and shaking after each addition. The next obvious step was the examination of emulsions containing two emulsifying agents, each of which normally stabilised a different type of emulsion. The emulsifier employed was a mixture of sodium and magnesium oleates. The ideal non-creaming emulsion would contain just sufficient disperse phase for the globules to be in closest packing when the emulsion had been homogenised. It is not necessary that the disperse phase of an emulsion should be homogenised. For example, in an oil-in-water emulsion there is nothing to prevent the emulsification of a relatively large volume of water in the oil by the aid of a suitable oil-soluble emulsifier before the final emulsification of the whole in water by means of a water-soluble emulsifier. Such complicated emulsions have been described by the author. (From the Chemical Department, Queen's University, Belfast.)

The Chairman expressed the appreciation of the meeting of Mr. Parke's interesting paper and demonstration.

Mr. D. Lloyd Howard proposed a vote of thanks to the author.

Mr. R. R. Bennett seconded, and the vote was carried with acclamation.

Mr. Parke briefly replied.

The next paper was read by Mr. R. R. Bennett on

A Note on the Spectrographic Absorption of Ergometrine in Relation to the British Pharmacopœia Colour Test

By Noel L. Allport and S. K. Crews

[Abstract]

The recent discovery of a new alkaloid by Dudley and Moir ("British Medical Journal," 1935, 1, 520) possessing in a high degree the physiological action of ergot marks an important advance in the chemistry of water-soluble ergot-alkaloids. The alkaloid, ergometrine, shows in aqueous solution a pronounced fluorescence which when examined in filtered ultra-violet radiation is considerably more brilliant than that exhibited by ergotoxine. Ergometrine also gives a colour reaction with *p*-dimethylamino-benzaldehyde similar to that of ergotoxine, and the authors have determined the absorption curves of ergometrine and of its colour test derivatives in order to ascertain their relationships, as also to those of ergotoxine. The colorimetric determination on each sample of ergometrine was conducted by Allport and Cocking's modification of the Maurice Smith colour test (the reagent being a 0.125 per cent.. solution of *p*-dimethylamino-benzaldehyde in 65 per cent. sulphuric acid by volume containing 0.005 per cent. of ferric chloride).

Ergometrine in aqueous tartaric acid solution shows an absorption band in the ultra-violet region with a maximum at 316 $m\mu$. The blue colours produced by the reagent from ergometrine exhibited a maximum absorption at 550 $m\mu$. Ergotoxine solutions possess an absorption band similar to that of ergometrine, and the coloured products from ergotoxine are spectroscopically identical with those from ergometrine produced under like conditions. With the original Maurice Smith reagent (without the ferric chloride), ergometrine and ergotoxine give similar blue colours with a maximum absorption at 580 $m\mu$.

Colorimetric comparisons were made by Lovibond tintometer of fifteen samples of ergometrine of varying purity, the intensity of the colours obtained by the modified Maurice Smith test being compared with that produced from a freshly prepared standard solution of ergotoxine ethanesulphonate. In all cases the results (expressed in terms of ergotoxine base) are well above 100 per cent. This suggests that the molecular weight of ergometrine is considerably less than that of ergotoxine, or that the indole residue occupies a greater proportion of the molecule. There is a clear parallelism between spectrographic and chemical examinations as observed from the magnitude of the absorption coefficient of each ergometrine solution, and the percentage equivalent (calculated in terms of ergotoxine) indicated by the modified Maurice Smith colour test. The purest specimen of ergometrine (m.p. 163/4° C.) in the form of very pale cream crystals gave an E value of 183 and a chemical equivalent by colour test of 1.73 of its weight of ergotoxine. The work was done in the laboratories of The British Drug Houses, Ltd.

Discussion

The Chairman said it was exceedingly satisfactory to have a preparation of ergot for obstetric work which would act in eight minutes. Pituitrin had been long used on account of its rapid action, but it was not so desirable in some stages of obstetric work. Work on ergometrine would be warmly welcomed. He asked if the action of ergometrine was quicker by injection.

Mr. Bennett replied that the rapidity of action was about the same.

The next paper, which was read by Mr. Brindle, was

The Determination of Lead in Official Preparations

By S. Wetherell

[Abstract]

Preliminary experiments demonstrate that the official method of lead assay is liable to give low results owing to the use of dilute sulphuric acid interfering with the quantitative liberation of oxalic acid from lead oxalate. Nitric acid is an unsatisfactory substitute to overcome occlusion difficulties, as it introduces large errors of a different nature (decolorisation of permanganate solution at the beginning and end of titration).

A process based on that of Berry ("Chemical, Engineering and Mining Review (Australia)," 1932, 22, 421) is suggested for assay of lead subacetate solution, lead acetate and lead monoxide. The error, due to permanganate attacking the acetic radicle, is about 0.5 per cent., but is reduced to a minimum by titrating at 60° C. and using optimal conditions for quantitative oxidation of oxalic acid, especially the amount of sulphuric acid employed.

The assay of strong solution of lead subacetate is as follows:—

Place about 1 gm. of the strong solution of lead subacetate in a 250-mil volumetric flask, dilute with 50 mils of recently boiled, distilled water, and add 50 mils of *N*/10 oxalic acid. The mixture is agitated thoroughly for five minutes, filled to the mark with distilled water, and shaken. Filter through a dry filter paper into a dry flask, rejecting the first 20 mils of the filtrate.

(*a*) Add 25 mils of dilute sulphuric acid to 100 mils of the filtrate, warm to 60° C. and the residual oxalic acid with *N*/10 permanganate titrate.

(*b*) Titrate another 100 mils of the filtrate with *N*/10 sodium hydroxide (carbonate free) using 4 drops of 0.2 per cent. phenolphthalein as indicator.

From (*a*) the total lead is calculated, each mil of *N*/10 oxalic acid corresponding to 0.01036 gm. of total lead. From (*b*) the alkalinity is determined, each mil of *N*/10 oxalic acid being equivalent to 0.01116 gm. of PbO.

For Assay of Lead Acetate, about 0.5 gm. of sample is placed in 200-mil flask, and assay with permanganate carried out as (*a*) above on 100 mils of filtrate. Each mil of *N*/10 oxalic acid corresponds to 0.01897 of $Pb(C_2H_3O_2)_2.3H_2O$.

The Assay of Lead Monoxide is performed on 0.4 gm. of material dissolved in 2 mils of glacial acetic acid, using a 200-mil flask and taking 100 mils of filtrate for titration with permanganate. Assays of lead content of lead subacetate solution and of the two lead compounds give results by the new assay process agreeing closely with those obtained gravimetrically, while B.P. assays were 1 to 2 per cent. low.

BRITISH PHARMACEUTICAL CONFERENCE 1935

Determination of Lead in Suppository of Lead with Opium. It was ascertained that acetic acid dissolves out the lead from this suppository without extracting matter from the opium interfering with precipitation of lead as chromate. The following method was finally adopted:—

Take about 1 gm. (one suppository), add glacial acetic acid (10 mils) and water (25 mils) and boil together gently for five minutes; cool, and dilute with water (25 mils). Decant the acid solution on to a moistened filter paper, filter, and wash the melted fat with hot water until the filtrate measures 150 mils. Heat the filtrate to boiling and add, with stirring, 25 mils of a 10 per cent. solution of potassium dichromate. Set aside for fifteen minutes and filter whilst hot through a tared Gooch crucible. Wash the precipitate with hot water until the washings are free from yellow colour. Wash with alcohol and finally with hot benzene. Dry at 110° C. Each gram of lead chromate is equivalent to 1.1736 gm. of $Pb(C_2H_3O_2)\ 3H_2O$.

The process gives results sufficiently accurate for routine purposes, whereas direct ignition is unsatisfactory.

Lead Plaster.—The following process for the determination of the lead was found to be both simple and accurate:—

About 1 gm. of the sample, accurately weighed, is boiled gently with 40 mils of acetic acid until the oily layer is quite clear. The cooled liquid is then diluted with an equal volume of water, and the mixture decanted on to a moistened filter paper. Wash the oily residue and filter with 25 mils of dilute acetic acid, followed by hot water with the filtrate measures about 150 mils. Heat the mixed filtrate and washings nearly to boiling, and add, with stirring, 25 mils of a 10 per cent. potassium dichromate solution. Set aside for ten minutes, filter whilst hot through a weighed Gooch crucible, washing the filter with hot water until the washings are free of any trace of yellow colour. Wash the precipitate finally with alcohol and ether. Dry at 110° C. The weight of lead chromate is calculated to PbO.

Moisture was determined by heating for three hours in an air oven between 105° and 110° C. Constant weight was unattainable, possibly owing to glycerin being driven off in later stages, but the loss per hour is constant after three hours drying and is almost negligible.

An examination of the fatty acids showed that these complied with the tests for absence of cottonseed oil, sesame oil, and arachis oil except in one case; Sample 1 giving a positive result for arachis oil. The main variation was found to be in respect of water content, this determining to some extent the consistency of the plaster, being harder the lower the proportion of water. The results of analyses are given in the following table:—

Sample	(Moisture per cent.)	PbO (per cent.)	PbO (per cent. of dry plaster)
1	0·49	37·46	37·64
2	12·10	29·16	33·18
3	5·65	31·37	33·36
4	4·50	32·36	33·90
5	8·66	30·31	32·95
6	2·73	29·57	30·46
7	3·80	32·96	34·21

The lead content varies within somewhat wide limits. There was no visible evidence of free lead monoxide, and it is probable that lead compounds other than normal salts of fatty acids are included in the plasters. Judging from the analyses, the samples are soft and sticky in texture when prepared with amounts of lead monoxide less than the official formula.

Discussion

Mr. Walmsley said he was grateful to the author for showing why an analyst cannot get 99.5 per cent. of lead acetate.

Dr. Hampshire spoke appreciatively of the work of the author.

The next paper, read in the absence of the author by Mr. Boyes, was on

The Analysis of Some Complex B.P.C. Ointments

By D. C. Garratt

[Abstract]

In analysing pharmaceutical preparations at the laboratories of the London County Council, assay processes have had to be developed in the absence of published methods. In doubtful cases, or where supplies have to be rejected, the results are checked by another method whenever possible as in the following examples.

Compound Benzoic Acid Ointment.—A complete analysis can be carried out on from 3 to 4 gm., special care in sampling and mixing being necessary in warm weather, as the ointment becomes very soft and easily separates. For assay, the ointment (about 3 gm.) is transferred to a separator and shaken out with petroleum ether in three successive amounts (about 50 mils each), after adding sufficient potassium hydroxide solution (2 per cent.), using solvent to transfer the sample and a little alkali to wash the original beaker. Any slight emulsion is allowed to pass along with the aqueous layer, the mixed aqueous layers are washed with solvent and the washings added to the main bulk. The fat is dried in a water oven after evaporating off the petroleum ether, using absolute alcohol to facilitate removal of last traces of moisture. Determine the ester value and unsaponifiable matter of the fat. Add excess of hydrochloric acid to the aqueous layer and remove the total acids with four extractions of ether. Either titrate the mixed ethers or, preferably, adopt the following procedure:—

Dry the ethers with 10 gm. of anhydrous sodium sulphate and pour off through a cotton-wool pledget into an evaporating flask. Wash the residue with ether two or three times and carefully evaporate the solvent nearly to dryness on a boiling water bath. Remove the flask from the water bath, evaporate the residual solvent by a gentle current of air and dry the residue in a desiccator. After weighing the total acids dissolve the benzoic and salicylic acids by adding 25 mil quantities of water, warming to 50° C. and filtering through a wet filter paper. Wash back into the flask the insoluble liquid acids of the coconut oil with alcohol and ether and weigh after evaporating and drying. The difference in weight between these and the total acids gives the weight of mixed benzoic and salicylic acids. Determine the acid value of the insoluble acids by solution in alcohol and titration with $N/10$ alkali. Calculate to the original weight taken and add the value obtained to the ester value of the mixed fats to give the saponification value due to the coconut oil.

Bromination is used to determine the salicylic acid in the mixed acids, test showing that this requires one to two hours. the details are as follows:—

Take an aliquot portion of the aqueous solution of the mixed acids (containing approximately 0.03 to 0.035 gm. of salicylic acid) and add 25 mils of $N/10$ potassium bromate solution (containing 15 gm. of potassium bromide per litre) and 5 mils of concentrated hydrochloric acid. Allow to react for one to two hours; add excess of potassium iodide and titrate with $N/10$ sodium thiosulphate. 1 mil of $N/10$ bromate=0.0023 gm. of salicylic acid. Benzoic acid is obtained by difference.

A modification consists of melting about 2.5 to 3 gm. of the original ointment in warm water and titrating direct with $N/10$ alkali to phenol red to give the total acidity. Filter through a wet filter paper, wash, acidify and extract with ether, continuing as above. (Results obtained on an ointment made strictly to the Codex formula are shown in a table.)

Methyl Salicylate Ointment.—Samples easily lose moisture and methyl salicylate. Moisture is readily lost during manufacture when the hydrous wool fat and beeswax are melted together.

(*a*) Total loss by evaporation is determined in a flat porcelain dish. One hour on a hot plate at 120° C. suffices for strong ointments. Partial evaporation is necessary on a boiling water bath in the case of dilute ointments to avoid loss of fats by decrepitation.

(*b*) Moisture is measured by the method of Dean and Stark ("Industrial and Engineering Chemistry," 1920, 12, 486), using xylene and a copper wire (Jones and McLachlan, "Analyst," 1927, 52, 383) with about 20 gm. of ointment.

(*c*) Methyl salicylate. Steam distillation into excess of $N/2$ alkali, boiling the distillate to saponify, and followed by back titration, has inexplicably yielded low results. The loss by evaporation less the moisture found by xylene distillation is a measure of the methyl salicylate in the simple ointments. Methyl salicylate was determined successfully by two methods. In the first the sample is transferred to a separator with chloroform and, after adding potassium hydroxide solution (5 per cent.), extracted by the method used for benzoic acid ointment. After boiling for one hour the salicylic acid is titrated, or extracted, dried, and weighed. The alternative process is to boil the ointment (about 1.5 gm.) with $N/2$ alcoholic potassium hydroxide for two hours. Neutralise to determine the saponification value. After removal of alcohol, precipitate with excess of barium chloride solution. Filter on a Buchner funnel and, after washing, re-extract the residue with hot water on a water bath. Filter and estimate the salicylic acid in an aliquot portion of the filtrate. Methyl salicylate can also be calculated from the saponification value of the ointment less that due to the proportion of fat present.

(*d*) Acid value and ester value. With strong ointments, two-hour ester values are determined. In the case of dilute ointments the saponification value (two hours) is taken. Vigorous boiling is necessary when paraffin is present.

(*e*) Volatile matter other than moisture and methyl salicylate is calculated by difference in compound ointments.

(A laboratory-made sample of strong methyl salicylate ointment gave results shown in a table.)

Resorcin Ointment.—The new formula is superior to that of the B.P.C., 1923, in not separating easily. For the estimation of the resorcin and fats, weigh out about 3 to 4 gm. of the well-stirred ointment into a wide-mouthed flask, extract with warm water three times, chilling the mixture and filtering off the aqueous layer through cotton-wool. Dissolve any fat on the cotton-wool in ether, after washing the wool with absolute alcohol, and add to the main bulk of fat. Add absolute alcohol to the fats and evaporate by a current of air on a boiling water bath. Repeat with alcohol until the fat is free from moisture and finally dry in a water oven. Weigh the fat and determine its saponification value (two hours). Make the aqueous extract up to 200 mils. Determine the resorcin in 25 mils. by the bromate titration method described for salicylic acid, using 50 mils of reagent. The reaction mixture need only stand for a few minutes. One mil of $N/10$ bromate = 0.001833 gm. of resorcin. Remove the resorcin from another 50-mil portion by acidification with hydrochloric acid and extraction with ether, dry the ethers with anhydrous sodium sulphate, observing the precautions necessary for salicylic acid as the resorcin is somewhat steam-volatile.

A tentative method is offered for the estimation of the glycerin. Boil approximately 6 gm. of ointment, accurately weighed, with water. Chill and pour off the aqueous layer. Repeat the extraction, add 10 drops of dilute hydrochloric acid and extract the resorcin with ether. Evaporate the aqueous portion to low bulk, mass the residue with a large excess of anhydrous sodium sulphate and extract in a Soxhlet apparatus with dry acetone. Evaporate off the acetone, dry the residue overnight in a vacuum desiccator, and weigh as glycerin. (A Codex ointment made in the laboratory gave the results shown in a table.)

Compound Resorcin Ointment.—Moisture is determined by xylene distillation on about 25 gm. The figure obtained will include the moisture from the starch. For general analysis divide the ointment into two parts by extraction in a Soxhlet thimble, first with acetone and then with petroleum ether. Remove the solvent and without further heating extract the resorcin with water as described under resorcin ointment, except using a wet paper as a filter. The resorcin solution is rather cloudy but this does not interfere with the estimation by $N/10$ bromate. Dry the fat as usual, weigh and determine the two-hour saponification value. Small discrepancies will occur owing to the presence of the birch-tar oil which is partly volatile. Dry and weigh the insoluble matter from the solvent extraction. Determine the zinc and bismuth by any of the many methods available. The following method is used by the writer:—

Dissolve 0.3 to 0.4 gm. of well-mixed insoluble matter by heating with a few mil of 1:1 hydrochloric acid. Dilute and precipitate bismuth sulphide with hydrogen sulphide, filter and wash. Dissolve the precipitate in nitric acid and a little bromine, dilute, boil off excess bromine, make faintly alkaline with ammonia, add ammonium carbonate solution. Boil for ten minutes, add 1 mil of strong ammonia, filter, wash, ignite the bismuth to bismuth oxide and weigh. $Bi_2O_3 \times 1.25$=bismuth subnitrate. Add hydrochloric acid and much ammonium chloride to the filtrate from the bismuth precipitate. Warm and titrate the zinc with standard ferrocyanide solution, using uranium acetate as external indicator. The sum of the zinc oxide and bismuth subnitrate subtracted from the total insoluble matter gives the percentage of dry starch present. Calculate the moist starch using an average moisture figure of 12 per cent. Subtract the starch moisture from the total moisture to obtain percentage water added.

The results on a standard Codex ointment (given in a table) show the accuracy attained by this analysis. The author thanks Mr. J. H. Coste, chemist to the London County Council, for permission to publish these methods.

DISCUSSION

THE CHAIRMAN said they were indebted to the author for the exhaustive treatment of the subject. It was particularly pleasing to have received a paper from the Chemical Laboratory of the London County Council.

MR. BRINDLE said the paper would prove of great value to analysts. The methods given for the determination of glycerin would be very helpful.

The next paper was on

The Stability of Aqueous Solutions of Ouabain and of K-Strophanthin

By H. BERRY

[ABSTRACT]

PRELIMINARY experiments on a sample of ouabain indicated that when its aqueous solution is near neutrality there is no diminution in potency by autoclaving at 115° C., even when the period of heating is prolonged to six hours. Accordingly a minimum period of one hour was chosen in the investigation, as if there is no loss of activity during heating for that time there can be no doubt concerning the stability of solution sterilised by the official process (autoclaving at 115° C. for thirty minutes). The test solutions were enclosed in sealed ampoules to avoid errors due to change in concentration and the autoclaved products tested by the B.P. frog method against unheated control solutions.

The results on aqueous solutions of ouabain (0.03 per cent. w/v) of International Standard showed that there is no loss of potency when the solution is autoclaved for one hour, provided the *p*H range is between 5.0 and 8.0. However, there is between 10 and 20 per cent. reduction in activity at *p*H 4.0 and *p*H 9.0. Autoclaving for five hours did not cause loss of activity with solution of *p*H 7.0 value, but the potency became zero in the case of solutions of *p*H 3.0 and *p*H 9.0. K-strophanthin exhibits remarkable stability in (0.09 per cent. w/v) solution when the *p*H range is narrowed down to between *p*H 6.0 and 7.0, but this difference renders it necessary to buffer k-strophanthin solutions. A reasonable value for the *p*H of distilled water is 5.8, and the figure may become as high as 8.0 if traces of ammonia from the atmosphere are not excluded. Such possible variation (from *p*H 5.2 to *p*H 8.0) is unimportant in the case of ouabain, as it is stable to heat within these limits. The stability of unbuffered solutions on storage was, as may be expected, similar to heat stability. An unbuffered solution of ouabain (0.03 per cent.) showed no loss in activity during storage for five months in Jena Glass ampoules exposed to light, while an unbuffered k-strophanthin solution (0.09 per cent.) stored under the same conditions lost 50 per cent. of its potency.

A series of ampoules were obtained from the stock of W. Martindale and examined along with the glass tubing and distilled water used for preparing the ampoules. The solutions (of ouabain and strophanthin) had been sterilised at 80° C. for one hour. The ampoule tubing passed the B.P. test for limit of alkalinity, but the finished ampoules yielded slightly more alkali than that permitted by the Pharmacopœia. The water (supplied in ampoules) proved to have a *p*H of 7.2, due apparently to the trace of alkali obtained from the glass. The *p*H of the solutions was found to lie between *p*H 6.5 and 7.0. The results of biological assays (in terms of standard strophanthin, B.P., or of International Standard ouabain) are shown in the following table:—

Solution	Original strength on label	Estimated strength after storage	*p*H of solution	Storage
K-strophanthin	0·1 per cent. w/v	0·12 per cent. w/v	7·0	5 months
K-strophanthin	0·06 per cent. w/v	0·06 per cent. w/v	6·8	9 months
K-strophanthin	0·024 per cent. w/v	0·027 per cent. w/v	6·8	15 months
Ouabain ...	0·04 per cent. w/v	0·02 per cent. w/v	—	5 years 5 months
Ouabain ...	0·1 per cent.	0·08 per cent.	6·5	3 years

BRITISH PHARMACEUTICAL CONFERENCE 1935

The stability of the strophanthin solutions can be attributed to the accidental adjustment of the *p*H by the trace of alkali from the glass to within the stability zone. It is interesting to notice that an ouabain solution after more than five years' storage still retained 50 per cent. of its original activity.

There was no discussion.

The final paper to be read was

Examination of Capsicum Extractives

By H. Berry

[Abstract]

Oleo-resin of capsicum has been a product varying in pungency in accordance with the solvent used for extraction and the extent of defatting. "Capsicin" was the term given in the 5th Edition of Squires Companion (1867) to the product obtained by making an alcoholic extract of capsicum and then extracting this with ether. The United States Pharmacopœia VI used ether for extracting an oleo-resin from capsicum. The solvent was changed to acetone in the U.S.P. VIII, but there is a reversion to ether in the IX and X revisions. The synonym "capsicin" was not used in connection with any of the U.S.P. oleo-resins. The British Pharmaceutical Codex in its first (1907) edition copied the U.S.P. VIII method of extraction with acetone, and applied the term "capsicin" to this product. The solvent was changed to 60 per cent. alcohol in the editions of 1911 and 1923, but the B.P.C. retained the name "capsicin" for this relatively soft extract of capsicum. However, Umney, in 1913, stated that the "capsicin" of commerce is the true oleo-resin extracted with ether.

A great deal of confusion has resulted from the amount of extractive matter (and pungency) varying with the solvent used, as also the varying solubility of the capsicum extracts. A comparison of the various oleo-resins is set out in a table.

A re-examination was made of the extractives from capsicum, using for this purpose the same sample of Sierra Leone capsicum throughout. It was found that extraction of the pungent principle was complete with ether using a one-litre Soxhlet apparatus. The residue after removal of ether by evaporation consisted of a dark red oleo-resin of thick consistency from which solid fatty matter ultimately separated. This product, shaken with successive quantities of alcohol (90 per cent.), was separated (after removal of solvent) into a red pasty mass (Fraction "A") containing all the pungency and a non-pungent neutral oil of dark red colour (Fraction "B"). A further fraction ("C") was obtained by extracting the ether-exhausted marc with 90 per cent. alcohol, this being a thick red liquid devoid of pungency. The final fraction ("D") in the form of a dark brown solid extract was obtained by percolating the exhausted marc with water. The extractives were:—

			Per cent.
Fraction "A"	Very pungent	Soluble in ether and alcohol ...	7·8
Fraction "B"	Non-pungent	Soluble in ether, insoluble in alcohol	9·8
Fraction "C"	Non-pungent	Insoluble in ether, soluble in alcohol	7·3
Fraction "D"	Non-pungent	Insoluble in ether and in alcohol, soluble in water	7·5

A capsicum extract ("E") was made by ordinary cold percolation with 90 per cent. alcohol, and some 70 per cent. of this dissolved on treatment with ether, leaving a non-pungent resinous residue. A consideration of the results shows that the pungent principle is wholly present in capsicum extracts made with either alcohol or ether, but that each of these solvents dissolves much non-pungent matter. Any alcoholic extractive from a capsicum extract made with ether, such as Fraction "A," contains all the pungent principle and is soluble in both ether and alcohol. A similar result is provided by Squire's process for making "capsicin." The oleo-resin Fraction "A" is at least three times as strong as oleo-resin of capsicum, B.P.C., 1923, and is soluble in fixed oils, chloroform, benzene, petroleum spirit and turpentine. The method of preparing an oleo-resin of the Fraction "A" type is being recommended by the Pharmacy Subcommittee for inclusion in the British Pharmaceutical Codex.

The Chairman then closed the session by proposing a vote of thanks to the authors, those who had read papers for the authors in their absence, the Council of the Pharmaceutical Society for reprints, the editor of the quarterly journal and Mr. Boyes.

CLOSING SESSION

The closing session of the Conference was held at the Municipal College of Technology on Thursday morning, at 9.30 a.m. Dr. Crossley-Holland was in the chair.

The Chairman called upon the secretary, Mr. F. Boyes, to read the

Annual Report

The following are the principal passages in the seventy-second annual report of the Executive:—

Membership of the Conference now consists of the members, honorary members and student-associates of the Pharmaceutical Society of Great Britain, the members of the Pharmaceutical Society of Northern Ireland and 108 persons at home and abroad who, not being qualified for membership of the Pharmaceutical Societies of Great Britain or Northern Ireland, have been elected by the Executive.

The Executive regret to report the deaths of several well-known members of Conference, including Mr. A. H. Jenkin, Mr. Thomas Hardy, Mr. P. A. W. Self, who has contributed many papers to the Science Meetings, and Mr. W. L. Beaumont, who was a corresponding member of the Conference for many years.

The seventh volume of the "Quarterly Journal of Pharmacy and Pharmacology," published in four parts during the year, constitutes the Year Book of Pharmacy for 1934. The Executive have again been represented on the Editorial Committee by Messrs. R. R. Bennett, C. E. Corfield and F. W. Gamble. Members, honorary members and student-associates of the Society and members of the Pharmaceutical Society of Northern Ireland are entitled to receive the Quarterly Journal, as published, on payment of 10s. 6d. annually; members of the Conference elected by the Executive are entitled to receive the Quarterly Journal on application.

The Harrison memorial medal and lectureship for 1935 has been awarded to Professor A. Smithells, C.M.G., F.R.S., who will deliver the Harrison Memorial Lecture at an Evening Meeting in the Society's House during the next winter session.

The Conference Research List has again been revised and the Executive hope that it will continue to be of assistance to members who have facilities for conducting research.

Twenty-five papers have been read at the Science meetings, and the Executive desire to express their thanks to the authors of the papers, who have placed material of much interest and value before the Conference. Thanks are also due once again to the Council of the Pharmaceutical Society for supplying copies of the papers in advance of the meetings and for providing facilities for publishing the papers in the "Quarterly Journal of Pharmacy and Pharmacology." The distribution of advance copies of the papers presented at the London, Leeds and Belfast meetings has enabled members to study the subjects beforehand and thus produced more useful and beneficial discussion than would otherwise have been possible.

Names of members to form the Executive have, as usual, been recommended by a subcommittee appointed by the Executive and a proposal will be submitted at this meeting that the following officers be appointed for 1935-36:—

Chairman.—H. Deane.

Vice-Presidents.—W. A. H. Naylor, J. F. Tocher, F. Ransom, E. H. Farr, E. Saville Peck, David Hooper, W. Kirkby, C. A. Hill.

Vice-Chairmen.—F. W. Gamble, D. Lloyd Howard, R. R. Bennett, J. H. Franklin, H. Skinner, C. H. Hampshire, F. W. Crossley-Holland.

Honorary Treasurer.—T. E. Lescher.

Honorary General Secretaries.—C. E. Corfield, G. R. Boyes.

Other Members of the Executive.—H. Berry, H. Brindle, B. A. Bull, H. Davis, A. J. Jones, E. W. Mann, with W. J. Beardsley, T. Marns and E. H. Simmons, nominated by the Council of the Pharmaceutical Society.

If these recommendations of your Executive are adopted, the above persons will be the officers of the Conference, together with the following, *ex officio*:—

President.—The president of the Pharmaceutical Society of Great Britain.

Other Members of the Executive.—The president of the Pharmaceutical Society of Ireland, the president of the Pharmaceutical Society of Northern Ireland, the chairman of the North British Executive of the Pharmaceutical Society, the chairman of the Local Committee and the honorary local secretary.

The Executive have considered the desirability of making alterations in the programme for Conference week, so as to minimise, if possible, the overlapping of science and delegates' meetings and to provide more time for the discussions on the increased numbers of science papers. They feel that the increasing interest in the scientific contributions demands an increase in the time provided for the science meetings and they propose to ask the Local Committee to provide if possible in its draft programme for:—

(1) Science meetings on the morning and afternoon of the Tuesday of Conference week, on the morning of Wednesday and on the morning and afternoon of Thursday;

(2) the excursion formerly taking place on the Thursday to be replaced by a short excursion or free period on the Wednesday afternoon and an excursion on the Friday in conjunction with the arrangements for the sports programme ;

(3) the closing session to be held on the Thursday afternoon at 4 p.m., following the last of the science meetings.

The Executive are delighted that the Conference has been afforded the opportunity of meeting again in Belfast and place on record their sincere thanks to the officers and members of the Pharmaceutical Society of Northern Ireland and especially the Local Committee for the many most enjoyable and well-arranged functions and excursions which they have provided and for the exceedingly generous hospitality which has been offered. An invitation will be extended at this meeting from the Bournemouth and District Branch to visit Bournemouth in June 1936 and the Executive feel sure that members will receive this invitation with great pleasure. Two further invitations have previously been reported, namely, from the Liverpool and District Branch for 1937 and from the Bath and District Branch for 1938.

Treasurer's Report

The report submitted by the treasurer (Mr. T. Edward Lescher) was as follows:—

The accounts for 1934 show that the income from subscriptions paid by elected members was £59 6s. 6d. This amount has been credited to the "Quarterly Journal of Pharmacy and Pharmacology" account. On the expenditure side of the account, the general expenses of the Conference were £133 6s. These figures were included in the Pharmaceutical Society's Financial Statement presented at the Society's Annual Meeting in May of this year. The total amount expended is £197 5s. 10d. less than the expenditure of the previous year. Apart from the figures to which reference has just been made, the Conference account shows a balance in hand of £139 5s. 3d. The usual presentation of books in connection with the Bell & Hills Fund was made to the library of the Leeds Branch of the Pharmaceutical Society in 1934. I have finally to report that the financial year of Conference has been one of placidity and members will be comforted at hearing that the balance at the end of 1934 exceeded that of the previous year by £12 4s. 11d.

The President (Mr. E. Saville Peck) proposed the adoption of the annual report. He said it represented an enormous lot of hard work by the honorary secretaries. He suggested that a telegram should be sent to Mr. Corfield, one of the secretaries, in appreciation of his work and regretting his inability to have been present at the meeting.

Mr. T. Marns seconded, and the report was unanimously adopted.

The President moved and Mr. Marns seconded that the financial statement be adopted. The motion was passed.

Place of Meeting for 1936

The Chairman then called upon "their old friend," Mr. F. E. Bilson, Bournemouth, past-president of the Pharmaceutical Society of Great Britain, to extend the invitation of the Bournemouth and District Branch to the Conference to hold the Conference in Bournemouth in 1936.

Mr. Bilson said his was a very pleasant task. He had been instructed as chairman of the local Branch to extend to the Conference a very hearty invitation to visit Bournemouth next year. It was now forty years since the Conference met in Bournemouth and he had the honour of being on the Executive at that time. (Applause.) Bournemouth was a modern town and scarcely existed a hundred years ago. It was in every respect up to date and had every facility for amusement and excursions. They would be extremely pleased if the Conference saw fit to accept the invitation and he could assure them that they would have a very hearty welcome. (Applause.)

Mr. V. J. Scampton, secretary of the Branch, said it was a privilege to support Mr. Bilson's invitation. At the same time his own personal feelings on the matter were somewhat mixed as the Bournemouth Branch decided that should the invitation be accepted, he was to be appointed secretary. (Laughter.) Recently, however, he had been so buoyed up by the excellent support he had received from the local committee in the tentative arrangements already made that that morning he most emphatically urged the Conference to accept the invitation and come to sunny Bournemouth in 1936, even though it might mean anxious days and sleepless nights for him. He found on looking through the records that it was in 1895 that the Conference last visited Bournemouth and he used this fact as the first point that it was time they came again. Secondly he was sure there were many who were already well acquainted with their delightful town, but for the benefit of those to whom Bournemouth was only a name, he could say that for a Conference centre, Bournemouth could not very well be beaten. They had every facility to house, sleep, feed and entertain the Conference in any numbers from one to 2,000, and the surrounding country with its wonderful scenery lent itself to enjoyable outings. The Mayor and Town Council had promised to do their part should the Conference decide to accept the invitation. They would receive them, entertain them and provide facilities for them to enjoy the sea breezes on the piers and play games in the public parks. They invited them to hear the renowned orchestra in their most up-to-date and handsome pavilion—all free of cost. (Applause.) As so many conferences met in Bournemouth during the year, the Local Committee felt gratified that they had been able to secure a date corresponding to this year's Conference and accordingly they asked the Conference to visit Bournemouth during the week of June 22-26, 1936. He could assure them of a most enthusiastic welcome. (Loud applause.)

Mr. Marns proposed the acceptance of the invitation.

Mr. David Warwick, president of the Pharmaceutical Society of Ireland, seconded and the invitation was accepted by acclamation.

Election of Officers

Mr. H. Humphreys Jones proposed the election of officers. He regretted that Mr. Harold Deane was unable to be present that day. He had just undergone a very severe operation but they were delighted to hear he was making excellent progress.

Mr. D. J. Williams seconded the proposition, which was passed unanimously.

The Chairman said the following telegram had been sent to Mr. Deane: "The 72nd meeting of the Pharmaceutical Conference assembled in Belfast send you their most sincere greetings and express regret at your enforced absence. Crossley-Holland."

Presentation of Books

The Chairman said they now came to one of the pleasantest little events of the Conference and that was to ask the acceptance by Mr. Storey of a gift of books from the Bell and Hills Fund to the library of the Pharmaceutical Society of Northern Ireland. If Mr. Storey had a spare moment in his busy life he could occupy a Sunday afternoon by reading "Hydrogen Ions" and no doubt some of the members would like to make excursions into the land of Cytology. (Laughter.) He asked the acceptance of the books with the love of the Conference.

Mr. Storey said it gave him exceeding great pleasure on behalf of the Pharmaceutical Society of Northern Ireland to accept the gift. They had the beginning of a library in their headquarters. The books were most useful and most acceptable. Even though it might not be on the Sabbath he was sure he would with the help of his wife get through them in a very short space of time. (Laughter.) Mr. Storey recalled that when books were presented after the Conference in Belfast in 1898 there was no library and they were presented to a library. When the Society's Library was formed these books were returned and the Society now had two sets from the Conference. He accepted the gift with the greatest possible pleasure.

Thanks to the Chairman

Mr. Franklin, proposing a vote of thanks to the chairman, said he was not competent to use the eloquence that was necessary for that important vote of thanks. Many of them had looked forward for quite a number of years, those who were regular attendants at the Conference, to the time when they would have the privilege of working under Dr. Crossley-Holland, and they all knew without any words of his how well and how beautifully he had carried out his duties. He was, of course, such a man of parts that it was quite expected. He was a man versed in all the arts, science, medicine and politics and other things, he (Mr. Franklin) could not then mention, and he was sure to please them in more ways than one. If he wished to know what the Conference really thought of him he had only to think of the enthusiastic way in which his address had been received on Monday afternoon. (Hear, hear.) He himself did not like to think how many years he had been attending the Conference, but he was perfectly certain he had never heard a chairman's address received with such remarkable enthusiasm. In one way he would compare their chairman with a great Belisha beacon among the ancient lights or

BRITISH PHARMACEUTICAL CONFERENCE 1935

to a beautiful Peter Pan who would never grow old. They wanted him to remain exactly as he was—he was just right for them and they wanted to enjoy his friendship, wit and wisdom and counsel for many, many years to come.

Mr. Skinner, seconding, said that of all the Conference chairmen he had ever known for quite a large number of years he had never known one in the Science Section who could give illumination to the discussions with the wit they had had on this occasion. He had to confess that at times he had thought the Science meetings a little dull, but they had been a real pleasure on this occasion, and that had been entirely due to the chairman.

The resolution was passed with enthusiasm.

Dr. Crossley-Holland, in reply, thanked the members and Mr. Franklin and Mr. Skinner for what they had said and for their great appreciation of what he had been able to do. He could have done nothing had it not been for the loyal co-operation of everyone—of the Executive Committee and all the officials. The year had been a most harmonious one in the Conference and that had been due to the team work of all the members and of all old friends. It was impossible for him to single out anyone to whom he should give personal thanks, but there was one name, and that was of Mr. Boyes, who had carried on single handed. He had worked magnificently, and no chairman could ever have been less harassed than he had been. There was a lot he would like to say about their local Irish friends, but there would be an opportunity to do that later. He was deeply obliged to them and to the Conference for their vote of thanks, which he knew they meant.

The Chairman then declared closed the proceedings of the Conference meeting in Belfast.

DELEGATES' MEETING

Tuesday, June 25

(*Concluded from the C. & D. Supplement, June 29, p. viii*)

The President, at the close of his opening speech, invited the meeting to express its opinion on the new arrangements. Verbal assent to them was given.

The Resolutions

Mr. R. Macdonald Murray (Tees-side) proposed:—" That the Council be asked to set aside a sum annually, from the income of the Society, for the purpose of propaganda to educate the public to the necessity of restricting the dispensing of medicines to qualified pharmacists, or those under the supervision of a qualified pharmacist, and of restricting the sale of medicines and medicinal drugs to pharmacists." He said it was the opinion of his branch that the Society should organise a department which should have at its disposal a definite sum for the purpose of safeguarding pharmacists from attack in Parliament and sponsoring inspired articles pertaining to pharmacy in the lay Press. The passing of the Dangerous Drugs Act, the Labelling of Poisons Regulations, the Therapeutic Substances Act, the recent Pharmacy and Poisons Act, showed that there was a growth of opinion not yet crystallised among Government departments, the medical profession, other traders and the public for controlling the sale of medicines. In the passing of the above Acts the so-called rights of pharmacists had never been taken into consideration. The widespread dissemination of proprietary medicines had given birth to an even greater evil than the proprietary medicine " ramp " itself—he referred to the attitude of some manufacturers who have flooded the country with " rivers " of medicines sold as substitutes of the better-known proprietaries. In view of the present chaos of the distribution of medicine a " Distribution of Medicines Bill " would appear. They must convince Parliament and the public that the present system is injurious to public welfare.

Mr. W. R. Brackenbury (Tees-side) seconded the resolution.

Mr. P. M. Duff (Glasgow) said his branch was cordially in support of the separation of dispensing and prescribing. He did not see what good it would do pharmacists to get educated in biochemical analysis to get blood tests when they were not getting the business. In Glasgow they also suffered from the question of the open shop kept by doctors competing against chemists and druggists.

Dr. E. G Bryant (Birmingham) asked for a ruling as to the exact limitation which the Jenkin case has placed upon the activities of the Society.

The Secretary (Mr. Linstead): The proposal in the resolution is that the Council shall spend a sum of money to advertise something, and there is nothing in the Jenkin decision which prevents the Council spending a sum of money in advertising.

Mr. G. R. Knox-Mawer (Wrexham) suggested that they should take a leaf out of the book of the policy of the Labour party. They should get pharmacists to take up public work.

Mr. C. A. Buick (Glasgow) was entirely in agreement with the resolution put forward by the Tees-side Branch, but thought it did not go far enough. He held that the only way to educate the public was by Act of Parliament. The policy of the Council had been one of procrastination.

Mr. R. E. Jackson (Newcastle) thought that if such a resolution as had been proposed was adopted there it rather looked like throwing down the glove to a very powerful body like the medical profession. What they wanted was more collaboration with the medical profession—not to try to take away something from the medical profession which they knew perfectly well they had no intention of giving up.

Mr. R. Clitherow (Liverpool): We have a charter for our protection. We want to know what the Council are doing to give us protection.

Mr. J. E. Bowen (Aberdeen): The first proposal seems like asking for something while we are not prepared to give anything.

Mr. H. M. Hirst (Scarborough) thought this resolution would mean the total extermination of the single-handed man. They had first of all to get on good terms with the doctors.

Mr. G. L. Clubb (Liverpool) said that in his opinion the possibility of getting these beautiful thoughts in the resolution expressed in an Act of Parliament was practically *nil*. The medical profession to-day was becoming gradually as much a trade as a profession.

The President: I will ask the secretary to reply before we take a vote.

The Secretary thought the Council would say they were in entire agreement with what this resolution sought to secure, and if they differed it would be a difference on the means to be adopted. Personally, he could not see what type of propaganda was really going to bring these changes about. If they were to be brought about, that must be by Act of Parliament. At the present time the leaders of the B.M.A. were in favour of some type of separation of prescribing and dispensing, but the rank and file of the B.M.A. were not yet brought to that state of mind.

Mr. Murray, who also replied, disclaimed any intention of arguing that the Jenkin case prevented the Society from advertising. They would have to educate the public before they got legislation.

The President put the resolution, and declared that thirty-five voted for it. There was a much larger show of hands against it, and the resolution was declared lost.

Mr. W. R. Brackenbury (Tees-side) proposed:—" That a definite campaign for the education of local authorities on the wisdom of having dispensing done by qualified pharmacists be embarked on ; and that a clear and well-prepared statement on the subject should be sent to every hospital authority, thereby creating discussion in every town and in every local paper ; which would have an educational effect on the public, especially at this time when local medical schemes are being organised without, in many cases, the co-operation of pharmacy." He said he believed the Society was on right lines. It was taking the long view, and he suggested this resolution offered an important field of action. It was, moreover, a bread-and-butter policy. With regard to his resolution he suggested three things:—(1) The qualification was not known ; (2) if known not always appreciated ; (3) even when known and appreciated in many cases, through the curse of cheapness and false economy, it was passed over. In a town not more than 100 miles from Middlesbrough the local authority recently advertised for a " part-time " dispenser for the local municipal hospital of 350 beds, at the princely salary of £1 10s. a week, who " must be pharmaceutically qualified." One reply received was from a girl of nineteen with a few weeks' experience, and she was appointed.

(*Continued on p. 33*)

Trade Notes

Tangee.—Luft-Tangee, Ltd., 88 Regent Street, London, W.1, announce that Tangee Crème Rouge has been reduced in price.

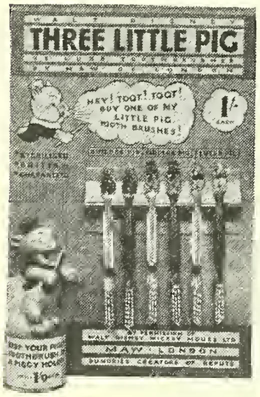
Skol sun lotion.—Skol Products, Ltd., London, have issued what is described as an entirely new type of preparation for use against sunburn. Skol is free from oils and greases and is invisible on the skin. It dries immediately but retains its active properties until washed off with water. It is non-fluorescent and filters out the injurious rays, at the same time allowing the health-giving and sun-tanning rays to pass freely to the skin. Skol was one of the twelve leading sun preparations on sale in America which were tested in Bermuda by one of the largest U.S.A. corporations. The products were applied in sections to the skins of 110 persons under supervision over a period of several weeks and "controls" were taken by "checkerboarding" the subjects' bodies and applying a different product to each "checker." As a result of this interesting experiment it is stated that Skol proved 88 per cent. better than all its competitors. Skol Sun Lotion will be supported by a national advertising campaign commencing July 12. Scrubb & Co., Ltd., Glasshouse Street, London, S.E.11, are the distributors.

D. and P. service.—Shawyer & Blake, 6 Cricklade Street, Swindon, Wilts, advertise their D. and P. service elsewhere in this issue.

Beiersdorf, Ltd., Welwyn Garden City, Herts, inform us that Nivea Soap and Nivea Baby Soap are now made in England. Nivea soaps are super-fatted with "Eucerite," a substance closely related to the natural fat of the skin; it is also the active principle of the Nivea Creme.

Foyles' Libraries, 119-125 Charing Cross Road, London, W.C.2, invite readers to send for particulars of their library scheme, which they describe as a very profitable sideline.

Novelty tooth brushes.—S. Maw, Son & Sons, Ltd., 7-12 Aldersgate Street, London, E.C.1, have used one of the Walt Disney series of pictures as a means of advertising tooth brushes. An attractive stand carries tooth brush holders modelled to represent the "Three Little Pigs" of the well-known Disney symphony. The tooth brushes themselves carry illustrations on the handle and should rapidly attain the "Best-Seller" class, especially for children's use. The tooth brush holders are sold separately and the tooth brushes are British-made and of the usual high-class Maw quality. The display material is bright and colourful. One counter card is here illustrated, a second and larger display stand carries six little pig holders, the whole being flanked by a portrait of the originator of the idea—Walt Disney.



Leipzig Fair.—The address of the London office of the Leipzig Fair is 34-36 Maddox Street, W.1, and the telephone has recently been altered to Mayfair 5616-7. An announcement in regard to the Fair appears elsewhere.

Potter & Clarke, Ltd., 60-64 Artillery Lane, Bishopsgate, London, E.1, have recently introduced a Children's Tonic which contains red bone marrow, chemical food and malt extract. The product, which is pleasant to take, is issued in two sizes.

Royal Dispensary School of Pharmacy.—Attention is directed in this issue to the transference of the Royal Public Dispensary School of Pharmacy to the Heriot-Watt College, the change over taking place at the beginning of the session 1935-36.

Flavours. — E.N.G.C.F.-Lambo-Bussub, Holland, draw attention to their new Lambo Flavour Caps for flavouring ice cream, etc., and Lambo-Limocaps for lemonade. Samples and particulars are obtainable from the above-mentioned company, who are the sole manufacturers.

Daisylax.—Attention is directed to Daisylax, sevenfold vegetable extract laxatives, further particulars of which will be found in recent advertisement pages. Daisylax is issued by J. E. Ellis, Ltd., Horsforth, Leeds, in three sizes, and the product is packed in attractive display cases.

Rheumatic and gout pills.—George Eade, Ltd., 232 Goswell Road, London, E.C.1, announce that they are conducting at the present time a national advertising campaign and the results are satisfactory. Chemists are asked to look to their stocks. Counter bills will be sent free on application.

Automatic weighing and filling machines.—The Automatic Weighing & Packing Machine Co., 22 Caroline Street, Birmingham, 3, recently drew attention in our advertisement pages to their automatic weighing and filling machines suitable for such materials as seidlitz powders, shampoo powders, face powders, etc.

Theotone tablets.—Allen & Hanburys, Ltd., Bethnal Green, London, E.2, inform us that they have recently issued theotone tablets in bottles of 25 and 100, also in a dispensing size, bottles of 1,000. Each tablet contains theobromine grains 5 with phenobarbitone gr. ½. Their use is indicated in cardio-vascular conditions.

Beaucaire dry cleaner, which is advertised elsewhere in this issue, is offered as a non-inflammable cleaner for removing grease and food stains from fabric, wearing apparel and upholstery, etc. Beaucaire is issued in two sizes by the Beaucaire Laboratories, 14 America Square, London, E.C.3.

The Erasmic Co., Ltd., Warrington, draw attention in this issue to their new shaving stick presented in a modern container, and also to their "Peerless" Erasmic soap which has been increased in size. These two products will be advertised during the year in twenty-seven national newspapers.

Foot comfort.—In our last issue was a four-page coloured inset which was intended to act as a sales guide to Dr. Scholl's Aids to Foot Comfort. This inset is both informative and interesting, and chemists who are seeking for new avenues of business will find it well repay them carefully to peruse this inset.

Births

Alexander.—At "Glencairn," Bowmont Street, Kelso, on June 25, the wife of J. B. Alexander, chemist and druggist, of a son.

Marriages

Atterbury—Short.—At Southampton, on June 26, William Richard James Atterbury, M.P.S., F.S.M.C., Bitterne, eldest son of Mr. W. R. Atterbury, M.P.S., Southsea, to Iris R. C. Short, younger daughter of the late Captain Short.

Liggins—Welton.—At the Parish Church, Berkswell, Coventry, on June 27, by the Rev. John Smyth, Edmund Naylor, only son of Mr. A. W. Liggins, to Mary Agnes, only daughter of Mr. Chas. H. Welton, M.P.S., Coventry.

Milligan—Close.—At St. Bride's Parish Church, Sanquhar, Dumfriesshire, on June 26, William Milligan, chemist and druggist, Kirkconnel, to Agnes Kerr Close.

Mort—Shelton.—At Skegness, recently, Spencer Campbell Mort, chemist and druggist, Lincoln, to Muriel Fanny Shelton, Skegness.

Rankine—Abbott.—At the Grand Hotel, Glasgow, on June 18, Matthew A. Rankine to Ethel Abbott, chemist and druggist, eldest daughter of the late Mr. James Abbott, chemist and druggist, F.B.O.A.

Silver Wedding

Jarvie—Quail.—At Temperance Hall, Kirkintilloch, on June 22, 1910, George Jarvie, chemist and druggist, to Elizabeth E. Quail. Present address: 29 Townhead, Kirkintilloch.

Deaths

Bedding.—On June 18, Mr. Frank Bedding, North of England representative of W. J. Bush & Co., Ltd., Ash Grove, London, E.8. Interred in Lawnswood Cemetery, Leeds, on June 22. Mr. Bedding joined the staff of W. J. Bush & Co., Ltd., in 1903 after previous service elsewhere and was appointed as representative for Ireland and North Lancashire in 1914. He joined his Majesty's Forces early in 1915. On his return to this country in 1919 he resumed his journeys in Ireland until 1923, when he was appointed to the Yorkshire and North of England territory. Mr. Bedding will be greatly missed by his many friends in the North and on the staff of the company.

Bell.—On June 24, Mr. Thomas Bell, retired chemist and druggist, Littlerigg, Ambleside, aged eighty-three. Mr. Bell was formerly in business in Lake Road, and retired in 1921.

Collins.—In New York, U.S.A., recently, Mr. James Stephen Collins, L.P.S.I., formerly of Miltown-Malbay, co. Clare.

Deery.—On June 27, after a long illness, the wife of Mr. John Deery, Ph.C., Main Street, Newtownstewart, co. Tyrone.

Lyons.—Recently, Mr. Robert Lyons, chemist and druggist, 29 High Street, Omagh. Mr. Lyons's was one of five names remaining on the Register of Chemists and Druggists of the Pharmaceutical Society of Ireland.

Matthews.—Recently, Mr. Arthur M. Matthews, late representative of W. J. Bush & Co., Ltd., Ash Grove, London, E.8, for the Midlands and Eastern Counties. Mr. Matthews joined Messrs. Bush in 1896; he retired in October 1933, and was an invalid until his death.

Morton.—On June 25, Mr. Henry Morton, retired chemist and druggist, 224 Brockley Road, London, S.E.4, aged eighty-three. Mr. Morton carried on a pharmacy in the Broadway, Deptford. In 1895 he opened a wholesale business at Crooms Hill, Greenwich, from which he retired in 1933. During the war he joined the 1st Battalion County of London Volunteer Regiment, and did useful service in an advisory capacity.

Personalities

The name of Mr. Ernest Warman-Wilbourne, M.B., has been restored to the Medical Register.

Mr. Samuel Cheers, chemist and druggist (Cheers & Hopley, chemists, Chester), recently slipped and sustained a fractured femur.

Mr. E. T. Neathercoat, C.B.E., J.P., treasurer of the Pharmaceutical Society and chairman of Savory & Moore, Ltd., has been elected Master of the Worshipful Company of Farriers.

Rt. Wor. Bro. W. Dawn Copley (managing director of Smart & Copley, Ltd., chemists, Bulawayo), District Grand Master for Rhodesia, E.C., has been appointed Grand Inspector of Royal Arch Chapters in Rhodesia.

Mr. Cyril F. Scurr, son of Mr. C. A. Scurr, M.P.S., F.S.M.C., Barnet, was a successful candidate at the June Pre-Medical examination of the Royal Colleges of Physicians and Surgeons in London.

Mr. Laurence Edwards, chemist and druggist, has given up his business at 246 High Road, Wealdstone, and is returning to Kenya. Correspondence should be addressed to c/o A. H. Wardle & Co., Ltd., Box 103, Nairobi, Kenya.

Mr. E. W. Bovill (R. C. Treatt & Co., Ltd., Hart Street, London, E.C.3) has been awarded the silver medal of the Royal Society of Arts for his lecture on "Empire Production of Essential Oils for Perfumery" (see *C. & D.*, 1934, ii, 698).

On the occasion of the visit of H.M. the Queen to the Old Westminster Fair, held in Dean's Yard, Westminster, S.W., from June 25-29, in aid of the Westminster Hospital rebuilding fund, Mr. F. G. Hobart, pharmaceutist to the hospital, was presented to her Majesty, who accepted a flagon of lavender water prepared in the pharmaceutical department to a traditional type of old English formula.

"C. & D." Retail Price List

The index of drug selling prices for the month of June was 144.7, no change from that of the preceding month. The figure for the corresponding period in 1934 was 143.5. While the index figure remains unchanged, there are several alterations in cost and selling prices of drugs that have a reduced frequency figure. On these items losses may easily be made owing to failure to consult the new Price List when received. In surgical dressings the index figure was unchanged at 136.2 (136.0 for the same period in 1934), which fact serves to confirm stability of prices. The changes and additions are carried into the Price Lst.

Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1935, p. 323.

(*From "The Trade Marks Journal," June 19, 1935.*)

"Red Ring" on circular design; for medicinal chemicals (3). By Cupal, Ltd., King Street Bridge, Blackburn. 559,716. (Associated.)

"Conas"; for medicines for piles (3). By M. F. Quilter, 55 Belgrave Square, Rathmines, Dublin. 559,793.

"Cosome"; for medicinal chemicals (3). By E. Merck, Frankfurterstrasse 250, Darmstadt, Germany. 560,253.

"Aspro"; for goods (11) excluding douches and the like. By Aspro, Ltd., Buckingham Avenue, Slough Trading Estate, Bucks. 559,523. (Associated.)

"Masfa"; for massage appliances (11). By Mechanical Utilities Co., Ltd., 57 Praed Street, Paddington, London, W.2. 560,170.

"Clifnick"; for sponge substitutes (india rubber) (40). By C. Nickson, 108 Latymer Court, Hammersmith, W.6. 560,207.

"Vaseline Hair Tonic" on label design; for preparations for the hair (48). By Chesebrough Mfg. Co., Con., 17 State Street, New York, U.S.A. 558,150.

Telegrams: "Atoleine Sedist, London."
TRADE MARK
ESTAB^D 1798
Telephone: Bermondsey 1141

John Bell, Hills & Lucas Ltd.
OUR COLLOIDAL
SUNBURN LOTION IS UNIQUE
Supplied with Chemist's name and address
Send for Sample & Prices
Oxford Works, Tower Bridge Road, London, S.E.1

"Ty·phoo" TEA (Owned by Sumner's "Ty.phoo" Tea Ltd. Birmingham)

is the delicious "*leaf-edge*" tea which doctors throughout the country are now recommending to patients with whom ordinary tea disagrees.

Applications invited for sample and terms for what is claimed to be

"The best paying line in the trade"

(This Company is not connected with any other House) *(21⅞% on selling price)*

PHARMACEUTICAL FORMULAS (P.F., Vol. I). Price **15s.**, by post **15s. 9d.**

PHARMACEUTICAL FORMULAS (P.F., Vol. II). Price **15s.**, by post **15s. 9d.**

SELL BRITISH!
HARROGATE SPA
SPARKLING TABLE WATER
Bottled and Aerated for the Corporation of Harrogate from one of Harrogate's 88 Springs by CAMWAL LTD.
AQUAPERIA The British Medicinal Aperient Water
Bottled by CAMWAL LTD.
CAMWAL Ltd. *Factories at:* London, Manchester, Birmingham Bristol, Harrogate.
WEST END OFFICES: 123 Pall Mall, S.W.1

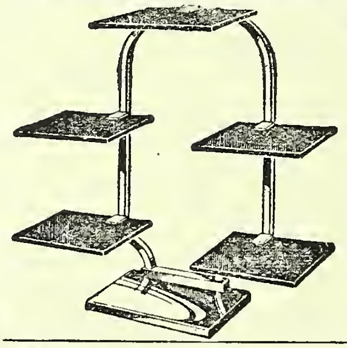
FOREIGN PROPRIETARIES ?

WILCOX, JOZEAU

Gladstone 6511

EXTRA RECTIFIED **ALCOHOL** FOR **PERFUMERY**
Write for Prices
JAS. BURROUGH Ltd. 1 Cale Distillery, LAMBETH, S.E.11

SAFETY RAZOR BLADES
TO PRIVATE BRANDS
We are specialists in the production of Safety Razor Blades to Private Brands—Home or Export—Prices competitive—Special wrappers, cartons and labels designed to customers' ideas—In fact your Private Brand complete and ready for sale—Large output available from most modern plant.
CONSULT:
Dominion Steel Corp. Ltd.
"Fleet" Works, Queen's Rd., Sheffield, Eng.


Attractive Display Stand for the Chemist
No. CDF 5540
Chromium Plated Display Stand, 24 ins. high, mounted on 8 × 5 in. heavy oblong base. Fitted complete with five Black glass shelves, size 9 × 5 in. EACH **30/-**
May we send you our new catalogue just published, No. CD 1616?
DUDLEY & Co. Ltd. HOLLOWAY RD., LONDON, N.7 City Showrooms: 65 Fore St., E.C.

THE ART OF DISPENSING. Price **8s.**, by post **8s. 6d.**

THE PHOTOGRAPHIC CHEMIST. Price **3s. 6d.**, by post **3s. 8d.**

THE C. & D. PRICE LIST FORMULARY, "P.L.F." Price **2s. 6d.** post free.

DISEASES AND REMEDIES. Price **5s.**, by post **5s. 3d.**

THE CHEMISTS' DICTIONARY OF MEDICAL TERMS. Price **3s. 6d.**, by post **3s. 8d.**

VETERINARY COUNTER PRACTICE. Price **7s. 6d.** net by post **8s.**

WOOTTON'S CHRONICLES OF PHARMACY. Price **10s. 6d.**, by post **11s. 3d.**

"THE CHEMIST AND DRUGGIST," 28 Essex Street, W.C.2

Information Department

INFORMATION WANTED

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated.

D/46. Estavia
W/36. Lavener's emulsion
R/18. Lister's Sal-Alkaline
H/26. Menko brilliantine
E/22. Nipit corn plaster
B/46. Pan-Melitis
B/36. Pick's salicylic plaster

THE
CHEMIST AND DRUGGIST
VOL. CXXIII. July 6, 1935 NO. 2891

The Belfast Conference Meeting

Although the papers read at the British Pharmaceutical Conference meeting at Belfast, reported in this issue (p. 9), were less numerous this year than last (twenty-five compared with thirty-two), it must be remembered that last year's figure constituted a record. There was no indication at the Conference of any slackening of interest in pharmaceutical topics, and on the social side this year's gathering must be accounted an outstanding success. The visitors were welcomed with true Irish hospitality, and the Belfast committees are to be cordially congratulated on the careful organisation that preceded the event. All who joined the outings will carry away memories of a countryside as full of historical as of picturesque interest. Opening the Conference on June 24, the chairman (Dr. F. W. Crossley-Holland), dealt with "The Relationship of Pharmacy to Medicine" (*C. & D.*, June 29, p. 779). Dr. Crossley-Holland is obviously able to speak with authority on this subject, and it may be hoped that his remarks will receive careful attention from both professions.

The papers presented in the Science Section cover a wide range. R. F. Corran and others collate the existing standards for *Thyroid*, and give comparative doses. *The Effect of Hot Solvents on Ergot* is investigated by R. F. Corran and F. E. Rymill. The same authors, in dealing with *The Estimation of the Mercury Content of Mercurochrome*, examine apparent discrepancies between two methods of assay. G. J. W. Ferrey advocates the iodate method of Heisig as a suitable means of determining *Ferrous Iron in the Presence of Organic Matter*. Norman Glass shows that the appearance of precipitated *Iodoform* and the iodine content of *Thymol Iodide* are greatly affected by the mode of preparation. In a paper on *The Preparation of Sterile Solutions (II)*, H. Davis suggests that the principles underlying the Tyndallisation process are at fault. Mr. Davis also investigates the effect of some common preservatives on *Staphylococcus aureus*. W. Smith has devised a new method for *The Assay of Glyceryl Trinitrate Tablets*. Another method of assay is put forward by H. O. Meek. *The Percolation of Cinchona and Belladonna* with reference to the effect of degree of comminution on rate of extraction of alkaloids is examined by A. W. Bull. C. L. M. Brown contributes *A Note on Isopropyl Nitrite*, showing that a solution in isopropyl alcohol may be prepared extemporaneously, the product being more stable than sweet spirit of nitre. In a second paper C. L. M. Brown reports upon the properties of *Propylene Glycol as a Solvent* for pharmaceutical purposes. C. T. Bennett and N. R. Campbell discuss *The Melting Point of Chloral Formamide* in the British Pharmaceutical Codex, 1934, and suggest amended figures. J. S. Toal and A. J. Jones show that *The Assay of Quinine in Iron and Quinine Citrate* is liable to be inaccurate unless special precautions are taken in dehydrating the extracted alkaloid. The *Alcohol Content and Specific Gravities of the Tinctures of the British Pharmaceutical Codex*, 1934, have been investigated by C. T. Bennett and F. C. L. Bateman, who suggest revised limits for alcoholic content in the cases of ten of these tinctures. G. N. Rapson and S. W. F. Underhill discuss *The Use of Rabbits in the Assay of Digitalis, Strophanthus and Squills*. M. M. O. Barrie, J. B. E. Patterson and S. W. F. Underhill find that *Cows' Urine* develops marked œstrogenic activity only during the last seven weeks of pregnancy. *The Deterioration of Atropine Eye Ointments on Storage* is investigated by Noel L. Allport. A table is given showing the effect of storage, and the fall in alkaloidal content is illustrated graphically. *An Improved Method for the Estimation of the Essential Oil Content of Drugs* is described by T. Tusting Cocking and G. Middleton. The effect of powdering on the yields of oil obtained are shown in tabular form. *The Relative Merits of Maceration and Percolation for the Preparation of Tincture of Digitalis* are discussed by H. Berry and H. Davis. Noel L. Allport and S. K. Crews have examined *Ergometrine* spectographically. S. Wetherell suggests simpler and more accurate methods for *The Determination of Lead in its Official Preparations*. H. Berry shows that *Aqueous Solutions of Ouabain and Strophanthin* may be sterilised and stabilised within specified *p*H ranges. Detailed methods for the examination of certain *Complex B.P.C. Ointments* are supplied by D. C. Garratt. H. Berry proposes that oleoresin of capsicum should revert to a defatted extract of capsicum with a pungency corresponding to that of the original "capsicin." J. B. Parke has made an original study of various types of *Emulsions*, and suggests the qualities desirable in an ideal emulsion. Enjoyable as many Conference meetings have been, we have no hesitation in suggesting that this year's gathering at Belfast will be remembered as one of the most outstanding successes in a long and distinguished record.

Last Week's *C. & D.* Achievement

Last week The Chemist and Druggist was faced with a problem which fortunately appears on very rare occasions. The problem was how to produce the Annual Special Issue of The Chemist and Druggist and at the same time give prompt service with the news of the British Pharmaceutical Conference which, as everyone knows, was held in Belfast the same week. The Chemist and Druggist goes to press on Thursdays, but owing to the technical difficulties which arise in the production of so large an issue, it is essential to proceed to press a day earlier. This meant that only two days of the Conference proceedings could normally be reported. It was decided, therefore, to produce an eight-page supplement. A schedule was accordingly carefully planned and a time-table to show step by step the procedure to be followed. Without going too deeply into details, we may state that Tuesday's photographs were in hand with the engravers on Wednesday afternoon, and the photographs of Wednesday's proceedings were rushed from Belfast to London early on Thursday morning. Copy had already been prepared during the night, and was in hand with the printers while the engravers were carrying out their part of the programme. The net result was that copies of the Special Issue and of the Supplement were ready for despatch by car at 2 o'clock for transport to Croydon Aerodrome. Three parcels were put aboard the aeroplane which left Croydon Aerodrome at 3.10. The Supplement and Special Issues were distributed the same evening among the visitors and specimen copies of the Special Issue itself were prominently displayed. The Chemist and Druggist thus reached the Conference at Belfast thirty-six hours ahead of its usual time. This journalistic achievement called for the closest co-operation between the staff, printers and the engravers, and how successful this co-operation was can be judged from the fact that the programme was carried out without a hitch from start to finish. The Special Issue carried 218 advertisement and 72 literary pages.

A Dangerous Diet?

THE injunction to "drink more milk" is featured in the advertisement pages of the daily Press by a well-known firm of practitioners of publicity. As a prime secret of advertising is, perhaps, repetition, there is no doubt that the campaign has met with a considerable amount of success. We should perhaps hardly go so far as to say that those who agree with the slogan that another type of beverage "is best" will have surrendered to the blandishments of the milk advertisements. Yet, the value of milk as a food has to be recognised, and periodically medical men burst into print in extolling the virtues of this type of food. We note with interest that recently the medical officer of health, Dr. H. P. Newsholme, spoke at a meeting in connection with the Birmingham Milk Week, and sang the praises of milk in no uncertain fashion. Milk, he pointed out, was a highly necessary food of which too little was consumed. He went on to contrast the value of milk as an energy giver compared with other foods, eggs, lean meat or fish, for example. The lime equivalent of one quart of milk was stated to be equal to that of 32 eggs, 7¼ lb. of oranges, 5 lb. of cabbage, 18 lb. of potatoes and 7 lb. of onions. But—there is unfortunately a very large "but"—he pointed out that milk in its raw state could not be advocated wholly without reserve. He advocated scalding the milk as a method of safety against a possible source of infection, and he further stated that the bulk of milk was pasteurised and was thoroughly to be commended for that reason. In a recent issue of "The Lancet" (June 22, 1935, p. 1427) an important article on the incidence of "Undulant Fever in Scotland" was published. The authors of the article were Professor W. J. Tulloch, a professor of bacteriology, University of St. Andrews, Dr. C. P. Beattie, lecturer in bacteriology, University of Edinburgh, and Dr. J. Smith, lecturer in bacteriology, University of Aberdeen, and bacteriologist to the City and County of Aberdeen. They pointed out that although undulant fever is common among livestock in this country, in Scotland the majority of patients affected with undulant fever had no direct contact with animals. In most cases, they stated, infection was probably acquired as a result of eating infected butter or cheese, which, however, was considered less likely. The raw milk in Edinburgh was found to contain nearly 20 per cent. of *Brucella abortus* and in the ordinary mixed retailed milk coming from several sources the percentage was 34·9. Aberdeen milk contained over 28 per cent. of the organism. Their considered opinion was that the proportion of undulant fever patients who drank one pint or more of milk a day was much greater than the proportion of the whole population who normally drank this quantity. In an infected milk, it is interesting to note that *B. abortus* is found in greatest numbers in the cream. Infected patients included several who for dietetic reasons consumed daily a considerable amount of milk. Undulant fever is rather an insidious disease, and the danger is that many milder forms of infection may pass unnoticed. The report gives an account of 105 cases of undulant fever which occurred in Scotland between the years 1929 and 1934; only 14 of these had contact with animals or meat and in consequence may have acquired the disease through their employment. In the remainder the consumption of infected milk appears to be the cause of illness. The case mortality was 4·1 per cent. This report in "The Lancet," however, raises the question as to how far milk can be depended upon to be free from this dangerous infection. It is true that pasteurised milk should presumably be free from the *Brucella* organism, yet it has to be admitted that the bulk of the milk consumed in this country is likely to be in a raw state and its suitability for children and invalids has to be considered. Another question arises, especially in connection with infant and invalid feeding, as to whether or not it is safer to use standard milk foods which are prepared and packed under the most hygienic conditions. If raw milk has to be scalded by the housewife it is almost certain to lose many of its qualities, and in such cases the destruction of vitamins and the coagulation of albuminoids call for some additional food substance to make up the deficiency. This is a point which might with advantage be used by manufacturers of invalid foods and of preparations containing the necessary food factors.

Weights and Measures Legislation

A PAPER read at the recent annual meeting of the Incorporated Society of Inspectors of Weights and Measures in London by Mr. J. E. Sloan, chief inspector for Coventry, has attracted attention in trade circles. The following is the text of a resolution moved by Mr. Sloan and carried unanimously:—

> "That in the opinion of this meeting, weights and measures legislation calls for revision in order to bring it into line with present-day trade conditions and practices and that, owing to the complex nature of the many questions involved, full inquiry into the subject should be made before the drafting of the necessary consolidating Bill is undertaken."

In the paper the series of weights legally in use in this country were classified as follows:—(1) Avoirdupois, the denominations of which are defined and legalised by the Act of 1878, Section 14. (2) Troy, the denominations of which are defined and legalised by the Act of 1878, Section 20. (3) Apothecaries', legalised by the Act of 1878, Section 20. (4) Decimal grain, legalised by the Act of 1878, Section 21. (5) Metric and metric carat, legalised by Weights and Measures (Metric System) Act, 1897. (It may be pointed out, in passing, that this is not an accurate statement so far as troy weights are concerned.) The author of the paper referred to amending Acts passed and Regulations made since the Act of 1878 came into force, and to the need, from an inspector's point of view, of a consolidating Act which might reduce the number of standards, make periodical reverification of weights and measures compulsory, and eliminate certain trade terms. But would a consolidating Act necessarily make for simplification? We turn from this Paper to a Bill introduced into the House of Lords last month. The Bill makes provision with respect to (1) sand, ballast and similar materials, and (2) the marking of bottles for use as measures. Several amendments, chiefly of a drafting character, have been put down for the Committee stage of the Bill, which was to have been reached on July 2 but was postponed. With sand and ballast we are not particularly concerned; but the wording of any clauses dealing with the marking of bottles by way of measuring quantities will need careful scrutiny. Up to the time of going to press the Bill had not been further discussed in the House of Lords.

BRITISH PHARMACEUTICAL CONFERENCE 1935

The President said that if this resolution was passed he would ask the Council to put in hand an inquiry to find out what the position is, i.e., what hospitals are without pharmacists in charge of the dispensary.

Mr. R. Macdonald Murray (Tees-side) seconded the resolution.

Mr. Skinner (London, N.) said he had been forty years in hospital service. He remembered the time when they had to fight this question in London and in great centres. They had to depend upon the chemists in the districts to help them. In 1904 there was an investigation from the Council and they got a list of all the places where dispensing was being done. Without the co-operation of the individuals scattered throughout the country it was absolutely impossible to make rapid progress. They could make progress, and they had made progress. The resolution was carried.

Territorial Representation

Mr. H. Long (Bristol) moved:—"That the interests of pharmacy would be more adequately served if territorial representation on the Council were instituted, and that the Council be urged to take whatever action is necessary to make provision for such representation." He said it was particularly fitting that this resolution should be submitted by Bristol—City of Pioneers—a new basis for the election of the Council which would increase the strength of that body and of the Society as a whole. For the first thirty years during which legal qualification was necessary the Council was elected by the personal vote in a London meeting. Was it surprising that generations of pharmacists grew up in the tradition that the Society existed as an examining body only, and it was of no interest once the certificate was obtained? The postal vote which came into operation through the 1898 Act found this tradition well entrenched. The speaker made a survey of the voting over the last twenty-six years. In the twenty years in which elections were held, the average percentage of voting members was 47. In the N.P.U. elections this year carried out on the basis of territorial representation there were elections in seven divisions: in one only was the poll down to the Society's average of 47 per cent. The percentage figures for the other six were 54, 58, 61, 65, 75 and 80. An imperfect machine, struggling already with a load many times heavier than that for which it was designed, could be tolerated only by keeping away from it. Now that the load had been increased 50 per cent. and there was no getting away from it, it was time to remodel the machine. The secretary's article on territorial representation, by inference rather than directly, warned them of the danger of losing, under T.R., "the right of every member to vote upon all candidates." They had lost more vital rights than this recently, one in particular. The Council could now pass by-laws without reference to a special general meeting, so that, once elected, the last element of control had gone. The Charter did not provide for compulsory membership, but they had got it. The Charter assumed that when a man had qualified he could be relied upon to conduct his business without further supervision, and gave him the legal right to do so: that right had been taken away. The Charter did not envisage the enlargement of the Council by the addition of State nominees, but they were there. The 1933 Act rode round, over and through the Charter, and the poor mutilated body could scarcely be regarded as a serious obstacle to the achievement of T.R. It might even be possible under the new system to give fresh life to the Charter.

Mr. Spaanderman (Mansfield), in seconding the resolution, said the whole point of this reform was to give members contact with their Council representatives.

Mr. J. F. McNeal (Harrow) said this question of territorial representation first saw the light in 1848, and came up again in 1872. In 1892 the same question came up again, "and here we are in 1935 facing the same situation." Why they wanted territorial representation was that when a member was elected from a particular area he would represent that area in the Council and would follow the policy of those chemists in that area; and if he did not follow the policy for which he was elected, he would be brought to book at the next election. They had tried every patent medicine. Let them try this one and bring their Council up.

Mr. W. J. Tristram (Wallasey) remarked that if a candidate was going to canvass chemists properly he must circularise, and it was going to cost him something like £100. If the costs were confined to his electoral area they would be much less, and there was a better chance for the best men to come forward. There should be no asterisks on the election paper to try to differentiate between one set of candidates and another. He thought that nine members of Council came from the Metropolitan area. The Metropolitan area was not entitled to have nine out of twenty-one. Since the war, when a gentleman reached the position of president of the Society, if he was merely from the Provinces he only occupied it for one year and if he was a Londoner he occupied it for two.

Mr. G. R. Knox-Mawer (Wrexham) said that most of them were aware of the movement in Wales for Home Rule, and if they were wise statesmen they would see that Wales was represented on their Council.

Mr. A. Greenwood Watkins (Reading) pointed out that territorial representation did not mean that there would be a contest in every area. The saving arising from that arrangement would be very considerable, and would go a long way to create interest.

Mr. Trevor Thomas (Cardiff) said that Wales was a nation and they wanted national representation, not territorial representation.

Mr. R. E. Jackson (Newcastle-on-Tyne) thought, now that there had been such an abnormal increase in the membership of the Society, that territorial representation would be a great advantage and would stimulate the interest that was obviously lacking at the present time.

Mr. R. Hudson (Burnley) hoped that if, and when, territorial representation was adopted, it would not be compulsory for a candidate to reside in that area.

Mr. J. T. Appleton (Sheffield) said the mover and seconder of the resolution had not convinced him. Territorial representation would exclude the ladies. They would have no representation, and they were perhaps 2,000 strong. He had no mandate from his branch.

Mr. Skinner (London, N.) said that as one who in this scheme of territorial representation would not be able to secure a seat unless someone condescended to offer it to him for some area, he was not particularly sympathetic to the change. Since 1898 areas have been fairly well represented. They knew very well their members of Council in spite of saying they did not know them. They were not a homogeneous body. They had pharmacists in the retail, pharmacists in the wholesale, pharmacists in the public service, and assistants. He believed to a certain extent London was over-represented. But how would their Council be able to get on without people in London that could give their time and service? It was not an easy thing to be on the Council. The cost for the man to get on now with compulsory membership was really excessive. The point he wished to emphasise was that they should leave it to their Council to consider this quite freely, unbiased by any vote. Let them ask their Council to take every possible step to find a better method than they have at the present moment, and they would probably make greater advance than by trying to put something across which they cannot do.

The President: It is competent for any member to move an amendment.

Mr. G. L. Clubb (Liverpool): I should just like to point this out, that the matter of territorial representation originally came up in 1848. It has been left to the Council since 1848. Isn't it time we got something done about it?

Mr. W. F. Hay (Aberdeen) said that at one time he had a considerable favour towards territorial representation, but his views were changed, and he had great sympathy with what Mr. Skinner said. He felt that at the present time they were very fairly represented in the Council as far as territorial representation was concerned, and he was doubtful, if they had what was asked, that they would be any better off. They would have great difficulty in securing candidates to stand under a system of territorial representation. He said so advisedly as far as Scotland was concerned. The only reason why territorial representation could be defended was that it would increase the interest of the members in the Council elections. There was apathy throughout the trade. The only method they could get the attendance was if they had something that was going to touch their pockets. He would be prepared to move that they take no action in regard to this matter of territorial representation at the present time.

BRITISH PHARMACEUTICAL CONFERENCE 1935

Mr. E. Robinson (Bradford) said they had twenty-one delegates. They wanted to vote for all their men. They wanted enthusiasm and the whole of the Pharmaceutical Society behind the Council. He seconded the amendment by Mr. Hay.

Mr. D. Harley (Edinburgh) supported Mr. Hay and Mr. Robinson.

Mr. W. H. Wandless (W. Cumberland) suggested that the matter be referred back so that the Council could bring in a scheme for the next Conference.

The President pointed out that the final responsibility and ultimate decision on the question of territorial representation rested with the Council. He wished to put the amendment.

After a brief discussion on procedure,

Mr. J. H. Gough (Leeds) said if they were going to decide that their delegates could only express the opinions of their branches, he thoroughly opposed it.

Mr. J. E. Crowe (Sheffield) suggested that the chief point about territorial representation was the expense. How could they get new blood on the Council if it was going to cost about £100 every year for an address, but it might be seven years before a candidate got on? He suggested that they pass this resolution for the Council to do what the Council considered right.

A delegate said he had been a believer in territorial representation, but he had gradually changed his mind regarding the wisdom of territorial representation such as was suggested by some of the speakers that day. The Council of the Pharmaceutical Society legislated nationally, and they were asking for a system of local interests to be looked after by local representatives.

Mr. F. C. Wilson (Bradford) said the point which appeared to him as the greatest opposition to territorial representation was what was happening under the present N.P.U. method of election. Each branch might have 500 or more members. Any one branch of sufficient power could carry its own representative to the Council every time, the remainder of the area being entirely disfranchised.

Miss Winch (Sunderland) thought that for electors in the territorial area to be able to command their representatives to put their views would be disastrous to pharmacy.

Mr. F. J. Conduit (Harrow) asked if it would be possible for a Welsh and Scottish territorial area to be represented in London by a Welshman in London and a Scotsman in London.

The Secretary said he was able to look at this particular question in a way which he thought no one else in the room could. The first point was that they had been talking about territorial representation and they did not really mean it, because they had very broadly got territorial representation. The next point was that territorial representation was not a cure for everything. It was not the only alternative to national election. The mere fact that they got such a high proportion of voting in the N.P.U. elections told him that their hospital firms, their manufacturers, their wholesalers might be swamped and would be swamped on retail votes in local territorial representation elections; and he thought they would lose the proper representation of this section of pharmacists. The principal argument that had been put up was that if they had territorial elections they were going to encourage more interest in the Society locally. The danger of this little electoral area was apathy. They got a particular man looked upon as the representative of that area, just as they did on pharmaceutical committees, and year after year the same man was put up simply because nobody liked to interfere. The Pharmaceutical Society was a national body dealing with national problems. and it had to look at these problems from a national point of view. Listening to that discussion he realised that they were having reproduced in miniature a reaction which had been going on all over the world in the last few years, this desire to split up into small groups. Did they want to turn national pharmacy in this country into a series of little areas dealing with their own problems? His advice was that they should accept an amendment definitely saying that territorial representation on the Council is not in the best interests of pharmacy.

Mr. Long, replying, asked if the secretary, as the servant of the Society, was giving the views of the policy of the Council. One or two people had said that territorial representation would divide the country into little areas. Would a member from Merthyr Tydfil lose all capacity to think nationally because he came from Wales? It was begging the point to say that if a man was elected for the North-Western Counties he had only the ideas of North-Western people. Had the present Council any special claim or authority to look particularly after the hospital or wholesale pharmacists? They should look after the interests of all.

The President then put Mr. Hay's amendment: "This meeting of delegates resolves that no steps be taken towards the institution of territorial representation at the present time." The amendment was carried, on a show of hands, by 87 votes to 58.

The President: I now put it as the substantive motion unless another amendment is moved.

Mr. Appleton moved: "That the question of a new method of election to the Council of the Pharmaceutical Society of Great Britain be referred to the Council and they to report at the next Conference."

Mr. Spence seconded. This amendment was adopted on a show of hands. and was then accepted as the substantive motion.

DELEGATES' MEETING

Wednesday, June 26

The delegates met at 10 a.m., the President (Mr. E. Saville Peck) in the chair.

Mr. J. F. Simon (Leeds) moved:—"That on application for registration under Part 1, Section 12 (3), and subsequently in respect of the retention of the premises on the 'Register of Premises,' a body corporate shall, in respect of any premises, pay a fee which shall be equivalent to the combined registration (or retention) fees paid by the individual pharmacist under Part 1, Section 1, (2), and Part 1, Section 12 (3)." He said the Act of 1933 provided that every member of the Society shall pay a yearly sum of 31s. 6d., fixed by the Council, as registration and retention fee. That was his personal fee for the keeping of his name on the Register. In addition he must pay, if in business for himself as a chemist, a further fee—not yet determined—for the keeping of his premises on the "Register of Premises." A body corporate must also pay this latter fee, but the body corporate was not called upon to pay the personal membership fee. It seemed fair and logical to members in Leeds that the company shops should pay a larger fee for registration of premises and for retention, and that this fee should equal the combined fees paid by the private chemist in business for himself. Some might think that the fee should be based in some other way, say, on the rateable value of the premises; but they must consider that probably only a very small part of a large establishment is concerned in the selling of drugs.

Mr. N. N. Armitage (Leeds) seconded the resolution. They in Leeds were most serious on this question. The aim of this resolution was to make right an old-time wrong. Companies got all the privileges of trading under the Pharmacy Act without any apprenticeship, without any examinations and with very little expense. The individual pharmacist, they claimed, should not be called upon to make a greater payment to the Society than his company competitor. It was only fair that the companies should pay a fee for shop registration equivalent to the combined fee of individual pharmacists, but for branch shops Leeds pharmacists said the individual should be on the same footing as the company. In putting right anything in this world some few, a small minority, were bound to suffer, and in this case he referred to the private company which for all practical purposes is equal to the individual. It might seem as if this resolution was penalising such cases, but even if it did he contended it was worth it. But there was no reason why the private company should not have special treatment, and surely it would not be beyond the power of the Society to make exceptions for private companies. The great thing, to his mind, was to accept the principle underlying this resolution.

Mr. T. Wilson (Edinburgh) said the aim of this resolution seemed to be to make the multiple stores pay more than they were doing. That might be a very worthy end, but he would suggest that the form in which this was phrased would create what might be a rather dangerous precedent. The qualification was a personal thing. A store or body corporate had no right to carry on the trade or profession of pharmacists without

BRITISH PHARMACEUTICAL CONFERENCE 1935

the pharmacist, and they employed, sometimes exploited, his services; but the delegates must be very careful. It seemed to him that some other way should be found to make them pay more. They must be very careful not to invest these bodies corporate with any powers which belonged to individuals.

Mr. R. Clitheroe (Liverpool) agreed with the sentiment of the motion, and agreed that the last speaker's sentiments were worthy of consideration. There was provision under the Act to fix fees up to £3. He might suggest in relation to those businesses which carry on pharmacy subservient to another trade, such as the co-operative societies or the big stores, that the Council be asked to enforce the maximum fee allowable by law on those people and also on any new limited companies that might come along.

Dr. E. G. Bryant (Birmingham) pointed out that the meeting had no indication of the intention of the Council with regard to shops registration fee. Should they merely ask the Council to use their discretion in favour of the individual chemist as against the multiple shop owner? It would be rather interesting to know exactly what was the object that the mover and seconder of the resolution had in mind.

Mr. R. E. Jackson (Newcastle) asked whether it would be strictly legal to impose subscriptions upon different branches of a company.

Mr. E. H. Simmons (a member of the Council), on the suggestion of the president, made a statement. He suggested that single-shop proprietors would be saying "Yes, let us stop these limited companies opening branches," as if the extra imposition of 30s. a year was going to stop any single business opening or in any way reduce the profits they were paying at present. The owners of branch shops would be somewhat nervous in their minds lest that should also apply to them. Though they might sympathise with the resolution as individuals, it entirely failed to recognise the position of the Society or the Council in this matter. The 1933 Act imposed upon the Society very serious administrative responsibilities. He feared very much that the adoption of this resolution would be a breach of the confidence reposed in them by the Committee of Inquiry. He suggested that the resolution was unfair and illogical, and that it should not be adopted by this Conference. Under its terms the private individual would pay 13½ guineas but the limited company for the same number of shops would have to pay 30 guineas. The personal registration fee carried with it certain definite privileges which only the individual could enjoy, and he became a member of a powerful organisation in many ways which limited companies could not. Yet they were going to ask a limited company in effect to pay for privileges which it could not enjoy. In the second fee, the retention fee, by resolution of the Council it had been decided that this shall be such amount as will cover the cost of inspection and administration of that particular part of the Act. Did anyone suggest that it was going to cost more to inspect the shop of the limited company than of the private individual? Every shop had to be conducted by the qualified man, so that out of the profits of every business, directly or indirectly, there had to be paid not only the shop registration fee but also the retention fee of the manager of that particular shop. Further, the resolution ignored the many cases of qualified men who for family reasons turn their business into a limited liability company; and did it not ignore the case of trustees or executors?

Mr. N. N. Armitage (Leeds) explained that the resolution did include the individual pharmacist who has a number of branch shops.

Mr. J. H. Gough (Leeds) said he would like, without any reflection on his colleagues who had put this resolution, to say that when this resolution was passed in Leeds he thought the only thing they had in their minds, at least the council had in their minds, was the chain shops. He did not think they had in their minds private limited companies.

Mr. J. F. Simon (Leeds), replying, referred to the maximum fee of £3 3s. that had been mentioned. They believed company shops should pay that, and that a differential scale of charges should be made accordingly.

The resolution was lost by a large majority.

Mr. J. H. Franklin (Manchester) moved:—"That steps should be taken at the earliest possible moment to secure adequate representation of pharmacy in Parliament." He thought everyone would admit that it was desirable they should have representation in Parliament. Practically every industry and profession was very strongly entrenched in Parliament. As it was the day of the young man, he suggested it should be a young man with the *flair* for politics. He must, of course, be a pharmacist. One of the earliest resolutions was spending money for propaganda to restrict the dispensing of medicines and the sale of drugs to pharmacists. If they were going to send a man to Parliament that was probably the best way to spend their money for the particular purpose of that resolution. He would have a wonderful opportunity. The only snag was that they must be sure they were spending their money rightly. The last money was not spent rightly. He (the speaker) had come to the conclusion there was one young man in pharmacy who was admirably qualified. They had to live in the future and fight for the future.

Mr. T. Miller (Manchester) seconded the resolution. He said they had had the advantage of representation in Parliament at a very special time when Sir William Glyn-Jones was present during the passing of the National Health Insurance Act. That showed how important it was for pharmacy to be represented in every possible Parliament. It necessitated a Pharmacy Fund, but that Pharmacy Fund was just a policy of insurance, and they ought to be very pleased to pay.

The resolution was passed.

Mr. F. C. Wilson (Bradford) moved:—"That the question of limitation of apprentices be thoroughly discussed." He pointed out that following this motion were three others on the same subject submitted by various branches. This pointed strongly to the urgency of the question. The Leeds Branch had a voluntary scheme in operation, and the Leicester Branch likewise, but speaking nationally they remained as they had been for years. He had personal knowledge of a young man fresh from the examination who asked £3 per week for his services and was turned down for having asked too much. New pharmacies were being opened in all districts, many of which were unable to pay their way. In the last four years a total of over 5,200 apprentices had been registered and yet there were no more than 14,290 pharmacists in the whole of Great Britain. Those kept out of pharmacy by the strenuous examination alone could not drop the business altogether after spending time and money in training. They opened drug stores and herbalists' shops. They opened their premises seven days a week, and who was to blame them? In so far as the present apprenticeship Regulations were intended to restrict the entry to the profession they were a complete failure.

Mr. E. Robinson (Bradford), in seconding, said it was the duty of the Council to get on with this job immediately.

Mr. R. Clitherow (Liverpool) said there was no mention of any legislation for learners or unindentured apprentices, but they were just as big a menace as properly indentured apprentices. He urged the Council to consider this.

The resolution was passed.

Mr. F. Newby (Oldham) moved:—"That there be a limitation of apprentices to pharmacies, and that as a commencement only one apprentice be allowed to any pharmacist during a period of six years; this period to be reconsidered after ten years." He said that the persons his branch were doubtful about were the wealthy financiers controlling many shops and desiring cheap labour to manage them now, and a steady and full supply of apprentices for the future. They considered that the great majority of pharmacists would welcome the resolution. They could easily get apprentices as cheap labour, but that meant the end of pharmacy as a profession or even as a living. It seemed to him necessary that headquarters should enforce regulations.

A delegate seconded the resolution.

Mr. W. W. Atkinson (Southampton) desired to submit a scheme by which would-be entrants into pharmacy would pass the Preliminary Scientific examination before leaving school.

Mr. J. E. Crowe (Sheffield) proposed the following amendment:—"That this meeting of delegates is not satisfied with the action taken by the Council regarding limitation of apprentices as recommended by the Aberdeen Conference, and urges them to realise the seriousness of the position and take the necessary steps to find a remedy." He said that after the Aberdeen Conference this was thoroughly discussed. Three years had gone by. What would happen in twenty years' time would not affect the Council very much. It was the younger men who had to think about what their sons would make in ten years' time.

Mr. H. S. Officer (Stockport) seconded the amendment.

Mr. W. H. Wandless (West Cumberland) believed the best

BRITISH PHARMACEUTICAL CONFERENCE 1935

step to take would be that young people entering pharmacy should take their Preliminary Scientific at a recognised secondary school. That would have a very great effect in limiting. Secondly, it would raise the standard and bring in persons who would be a credit to pharmacy.

Dr. E. G. Bryant (Birmingham) pointed out that there had been two propositions made to deal with this question of limitation. He thought they were all agreed that this was the most important question they had to face now that the Pharmacy Act was out of the way. The two propositions were—first, that boys should be encouraged to stay on at secondary schools before leaving to start their apprenticeship and pass the Preliminary Scientific examination. The Council had encouraged technical colleges in various parts of the country to institute courses for the Preliminary Scientific examination. It hardly seemed fair to the authorities that had been put to considerable expense in equipping and maintaining such departments that the supply of students should be cut off in that way. Another point was that the type of training in secondary schools for the Higher School Certificate varied very materially in its quality. The suggestion from the Oldham Branch was on the lines that there should be only one apprentice allowed to a pharmacist in a period of six years. Did not that create a tremendous difficulty of another nature? The average length of apprenticeship was, say, three years. After the apprenticeship the master was to be on the rocks for another three years. Experience has shown that merely to raise the standard of examination did not keep down numbers. He suggested that the way to face this question was by increasing the length of training. Let them have a course extending for three years for the chemist and druggist and four years for the pharmaceutical chemist.

Mr. D. D. Gee (Stockport) said that newspaper people with shops were strong enough to have Parliamentary representatives and to keep districts for themselves. Could they not do something like that?

Mr. G. L. Clubb (Liverpool) said that in his opinion the best type of apprentice was the one that had passed his or her Preliminary Scientific examination before registering. There was absolutely no excuse for the present tendency to regard him as a cheap form of labour.

Mr. R. Hudson (Burnley) gave an instance in which two apprentices are allowed for each shop, and one if an extra qualified man is employed. One apprentice every four years would be much better than the regulation at present in operation, and would not cause the trouble which might arise from the period being longer than the normal time of apprenticeship.

Mr. W. S. Culbert (Glasgow) was not surprised that the Council had been slow in going ahead with the matter of apprenticeship. It was fraught with tremendous difficulties. Could they be sure that all those who took the Preliminary Scientific examination would be taken on as apprentices in the shops afterwards? Could they be sure that only those who had taken the Preliminary Scientific would be accepted as apprentices?

Miss H. C. M. Winch (Sunderland) submitted that the new Rules for Apprenticeship would form the most effective method of bringing about the limitation of apprentices.

Mr. R. E. Jackson (Newcastle) supported the amendment. He was not satisfied that the proper method was to get apprentices to pass the Preliminary Scientific at secondary schools; but he was satisfied that the period of apprenticeship at present was too short. If they kept a lad at the secondary school until he was eighteen or nineteen, it would be very difficult indeed for him to settle down to work.

Mr. E. W. Skyrme (Hastings) warned the meeting against disturbing the continuity of the academic training of the apprentice.

Mr. A. R. G. Chamings (Leicester) suggested that the point raised by Miss Winch had answered the challenge thrown down that the Council had nothing in black and white dealing with the limitation of apprentices. If each of those 14,000 chemists adopted the position of having one apprentice they would soon be in as bad a condition as presumably they were in now. He suggested that conditions varied enormously between one district and another. Many chemists did not take apprentices at all.

Miss C. K. Lynch (Hastings) suggested that something should be done to equalise what apprentices receive in wages.

Mr. T. Wilson (Edinburgh) remarked that the Council had a very powerful weapon in their own hands. Approval of the Council should be required for those who wish to take apprentices.

Mr. T. Amson (Staffordshire) thought the qualified man should not be allowed more than one apprentice.

Mr. C. A. Buick (Glasgow) suggested that one way they could limit was by chemists being perfectly honest with the boy or girl coming along and telling them the hope they would have of a job in the future.

Mr. Crowe, replying, said everyone seemed agreed there should be some limitation.

On a show of hands the President declared the amendment carried, and before putting it as the substantive motion called on Mr. Newby.

Mr. Newby thanked the delegates for the way they had discussed this resolution. All the amendment practically did, he added, was pointing out that the regulation of apprentices was long overdue.

The President put Mr. Crowe's amendment as the substantive motion, and on a show of hands declared it carried.

Mr. J. Gower (Cardigan) moved:—"That the training of the apprentice in the chemist's shop should be considered with special reference to the chemists in agricultural and provincial areas." He said his branch had been discussing this resolution several times in the last three or four years. They thought the difficulty in the schools at the present time was that Latin was not taught. They urged that Latin should be made compulsory in the Regulations, that the Preliminary Scientific should be passed before the apprentice is taken, and that there should be a three years' apprenticeship.

Mr. Lewis, in seconding, said that he had had several applications in the past six months, and he had turned them all down. He told them what the cost would be, and they turned most of them into clergymen. (Loud laughter.)

Mr. G. R. Knox-Mawer (Wrexham) said that the education in the secondary schools in North Wales was second to none.

Dr. E. G. Bryant (Birmingham): May I just reply to that? Unfortunately, I have just had the results of a batch of students in secondary schools in North Wales who have come down. They want to come into the Technical College in Birmingham. (Laughter.)

The resolution was carried.

Mr. W. R. Arnold (Exeter) moved:—"That the advisability of including first-aid instruction in the education of the pharmacist be considered." He said that some of them had a natural bent towards surgical bandaging or treatment in emergencies, but it was suggested that very few men in business now were able to deal effectively with such cases.

Mr. F. Southerden (Exeter) seconded the resolution.

Mr. P. M. Duff (Glasgow) moved a direct negative, because, he said, the idea was directly antagonistic to their practice. It had been held in the law courts that it is illegal for a chemist to give first aid and charge for it.

Mr. G. W. Evans (W. Metropolitan): All apprentices have to do is to join St. John ambulance classes.

The President: I do not accept a direct negative as an amendment.

On a show of hands, the resolution was declared lost by an overwhelming majority.

Mr. R. MacDonald Murray (Tees-side) moved:—"That in view of the chaotic muddle made of pharmaceutical services during the late war, pressure be brought to bear on the Government to grant adequate recognition of the pharmaceutical qualification in the defence services." On the Western Front he had known members who volunteered for service and were kept mending duckboards and on general factotum duties while mending duckboards and on general factotum duties while totally unqualified youths were muddling away as best they could in the dispensaries. Only those who in any way participated in the medical services realised what mismanagement in this respect cost the country.

Mr. W. R. Brackenbury (Tees-side) seconded the resolution.

After the President had remarked that there was no one who was keener on this subject than himself, the resolution was passed unanimously.

A vote of thanks to the president, proposed by Mr. R. R. Bennett and seconded by Mr. A. E. Young, was passed by acclamation.

British Pharmaceutical Conference

Social Side

The names of the overseas visitors specially welcomed by Dr. Crossley-Holland during the opening session were:—Mr. and Mrs. Firth (Durban); Mr. and Mrs. Fyvie (Pietermaritzburg); Captain Unsworth (Southern Rhodesia); Miss C. H. Batten and Mr. and Mrs. J. Waters (New Zealand); Mr. R. H. Bennett (New South Wales).

* * *

The seventy or so ladies who were fortunate enough to be included in the party visiting the works of The York Street Spinning Co., Belfast, on Tuesday afternoon had the intricacies of flax weaving explained to them by genial and courteous guides. Although the humidity of some of the weaving floors proved rather trying, the visit was well worth while, as these works are the largest of their kind in the world. About 5,000 employees are engaged in the manufacture of every description of linen, which has an international reputation. The tour of the works commenced with a visit—via a speedy works hoist—to the teasing department where raw material in the shape of flax from Courtrai and Latvia was most deftly being combed and teased by expert hands. Machinery, superhuman in its efficiency, was inspected in the heckling department and ingenious processes watched with interest in the sorting, carding and preparing sections. Gossamer threads of unbelievable fineness were being spun in the spinning rooms as well as coarser counts. The most interesting process to the ladies, however, was the weaving of designs in fine linen, and an opportunity of watching these marvellous machines at work was afforded in the various weaving departments where these looms were busy weaving a huge variety of intricate and beautiful designs. Despite the heat the ladies braved the temperature of furnace rooms and also inspected the modern electrical generating plant. Covetous eyes were cast on the beautiful specimens of work displayed in the sale room. Linen tweeds, tablecloths, hand-embroidered handkerchiefs, printed linens—indeed every variety of linen on display was inspected with admiration. The visitors' book—with its imposing list of famous names—was duly signed, thanks rendered to the indefatigable and courteous secretary of the company, after which buses conveyed the visitors to a welcome tea at Belle Vue Gardens. Altogether a visit of profit and intense interest.

* * *

On Wednesday evening members of the Conference were invited to a reception by the Chancellor and senate of Queen's University. The guests were received in the Great Hall by the vice-chancellor (Mr. F. W. Ogilvie, M.A) and Mrs. Ogilvie, and afterwards there was dancing until midnight. In connection with the event some of the departments of the University were open for inspection and many of the visitors spent an interesting half-hour in the library, where there was a special exhibit of historic works on pharmacy and allied sciences, while others were intrigued by the botanical, physics, chemistry and zoological displays. Refreshments were served in a marquee in the quadrangle.

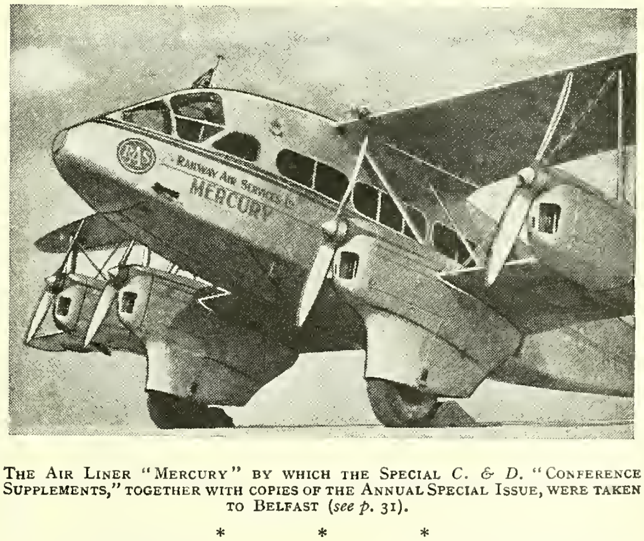
* * *

The first of the two big excursions of the Conference took place on June 27, following the closing session. Rain was falling as the party, numbering about 600, set out by motor coaches from Belfast, but the weather had cleared by the time Larne was reached. Meanwhile much interest had been aroused by the historic Carrickfergus Castle, as the route passes quite close to its walls, the seaside town of Whitehead and the quaint village of Glynn. Next came the world-famous Antrim Coast Road, which more than came up to expectations. Lunch was taken at Garron Tower, in the delightful grounds of which is a eucalyptus tree claimed to be the finest in Europe. After lunch and the taking of the official photograph the journey was continued via Glenariff and Ballymena to Antrim, a halt being made for those who desired, and the majority did, to walk through the beautiful Glens. Tea was taken at Antrim. From there to Belfast, which was reached at 7.30 p.m., part of the route was over the course (the seven mile straight) of the Ulster motor cycle races. Although the weather was not all that could be desired, praises of the scenery and of the manner in which the excursion had been organised were to be heard on all sides, abundant evidence of a most enjoyable day.

* * *

At the dance and cabaret on Thursday evening, during an interval in the programme, Dr. F. W. Crossley-Holland called on Mr. John Keall, who voiced the feelings of all in his speech of thanks to the Local Committee for their wonderful hospitality and perfection of arrangements. This was seconded by Mr. J. H. Gough in a graceful speech, in which Mr. Gough pointed out that from personal knowledge the work of organisation must have been enormous, seeing that Belfast had catered for nearly twice the number of visitors that he and his Committee had dealt with in Leeds. The vote was carried by acclamation, and Mrs. Crossley-Holland then made presentations to Mr. Fred Storey, Mr. D. L. Kirkpatrick, Mrs. Storey, chairman of the Ladies' Committee, and Mrs. Dwen, secretary of the Ladies' Committee. Mr. Storey and Mr. Kirkpatrick each were given silver salvers, Mrs. Storey was presented with coffee cups and spoons and Mrs. Dwen a diamante bracelet. Mrs. Crossley-Holland also expressed her admiration of the way in which the work of the Conference had been carried out. She would return to her own country, she said, with a large portion of her heart left in Ireland. Dr. Crossley-Holland, in a happy speech, referred to the personal enjoyment he had received from his visit to Northern Ireland and hoped, he said, to return soon again and to bring with him his family. Shortly he would be setting off for Yugoslavia, and when riding in the Balkans his thoughts would frequently return to the happy time he spent in Belfast. He then made personal gifts to Miss Roulston, Mr. Kirkpatrick's assistant, and Miss Clarke, the London secretary, as a recognition of the efficiency with which their work had been done. Before leaving the guests were invited to record their signatures in an autograph album which had been signed by presidents of the Pharmaceutical Society in Great Britain and Northern Ireland and members of the Executive Committees, including past-presidents and past-chairmen. The cabaret was a very high-class display of dancing by local talent, and the clever work of the children in particular came in for much admiration.

* * *



The Air Liner "Mercury" by which the Special *C. & D.* "Conference Supplements," together with copies of the Annual Special Issue, were taken to Belfast (*see p.* 31).

* * *

The "long-day" excursion began early, as the train for Portrush left Belfast at 9.25 a.m. In spite of the fact that the attraction of the cabaret and dance had kept many up well into

BRITISH PHARMACEUTICAL CONFERENCE 1935

CONFERENCE PICTURES

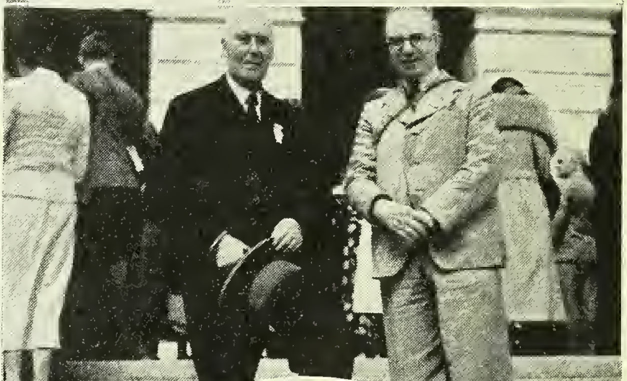
BELFAST 1935

1

2

3

4


5

6

7

8

BRITISH PHARMACEUTICAL CONFERENCE 1935

the small hours of the morning, there were no laggards. Between 500 and 600 went on the special train, some with golfing equipment, others with rackets or "woods," and all were welcomed on the platform at Portrush by Mr. J. H. Seery, chairman of the Portrush Urban District Council, and Captain W. R. Shutt, M.C., sports manager. Thereafter the "sportsmen" went their various ways and the bulk of the crowd boarded the electric trams and had a delightful journey to the Giant's Causeway, where, having lunched at Kane's Hotel, some walked and others—not so energetic—rode to the famous freak of Nature. There many succumbed to the wiles of a local photographer (who declared he came from Birmingham but must have kissed the blarney stone many times) and were "took" sitting in the celebrated Wishing Chair. The "Giant's Grandmother" came in for a good deal of attention. The weather was perfect, and it was with a certain reluctance that the party reassembled for tea at Kane's preparatory to leaving for Portrush. Belfast was reached about 8 p.m. and feats of prowess by the sportsmen were intimately discussed at the final smoking concert.

* * *

The attraction of the Giant's Causeway proved a stumbling block to the sports sections. Tennis had to abandoned, while the entries of those taking part in bowls were greatly reduced in number. The journey to Portrush cut the time available for the bowls singles in the morning and the final had to be postponed. The winners of the semi-finals were W. Desmond and D. Anderson, both of London, and it was agreed that the final should be played off at home to determine the prize-winner. The international match England v. Scotland was played in the afternoon, the teams being:—*England:* Messrs. Bradbury, Taylor, Anderson and Desmond (the skip). *Scotland:* Messrs. Duff, Hardy, Tainsh and Culbert (skip). The result was that England won for the third time in succession with 26 points to 6. In golf there were thirty players, and after a hectic week some striking figures were returned. Most of the players admitted they blew up at the danger zones usually indicated by such charming names as Giant's Grave, Calamity Corner, and, on the Dunluce course, by one called Purgatory. It must be admitted that none of the chemist players would have won the open championship, nevertheless there were a select few who played attractive golf. The winner of the Edmund White trophy was W. E. Phillipson, Manchester, with a net return of 73 strokes, the bogey of the course being 75. There were two 75's returned, F. McMullan, Belfast, and N. H. Burns, Leeds, and after a further nine holes the former was able to claim the position of runner-up. In the ladies' golf on the Dunluce course, Mrs. L. G. Aves, Manchester, was the winner with 79 net. In the putting competition Mr. W. Gray, London, last year's winner of the Edmund White trophy, captured the prize.

* * *

The accommodation at the Grand Central Hotel was strained to the utmost for the smoking concert, but everyone was happy, for the chairman was in his element. In the Science Sections, Dr. Crossley-Holland had been able at odd moments to enliven the staid proceedings with an appropriate anecdote, but his style, naturally enough, was cramped. On Friday evening, however, there were no restrictions and the chairman, himself an entertainer of no mean merit, was assisted by Mr. O'Rafferty and his pupils (with the bagpipes), an admirable local *raconteur* Mr. Stewart, recitations by Mr. A. Storey (brother of Mr. Fred Storey), Miss Edith Mathews, Miss McKibbin and Mr. McCandless. Songs were contributed by Mrs. Abernethy and Mr. F. Doherty, and the chairman kept things lively by introducing competitive community singing between Irish, Welsh, English and Scots contingents. The prizes won in the golf competitions and the Chemists' International Bowling cup (won by England) were presented by Mrs. Storey. A "special prize" presented by Mrs. Storey to the chairman created the sensation of the evening.

* * *

A number of those who attended the Conference and were staying in Belfast over the week-end took part on June 29 in an excursion organised by Mr. L. W. Jones (chairman of the Anglesey Branch of the Pharmaceutical Society of Great Britain) to the Mourne Mountains. The route chosen was through Newry, Banbridge, Dromore, Hillsborough and Lisburn to Rostrevor. After luncheon the party went on to Newcastle, and tea was served at the Slieve Donard Hotel. Belfast was reached after visiting St. Patrick's grave at Downpatrick, and the Conference could fairly be said to have closed down with this delightful function, which was an afterthought of some who love Ireland.

Some of the Party at Rostrevor. The "jockey" is Mr. L. W. Jones and the "jarvie" Mr. J. T. Appleton.

* * *

The Conference Pictures

(1) Mr. Connor, Newry, and Mr. McRoberts, Belfast.

(2) Mr. and Mrs. Tyler, Redhill, Surrey, and some friends at Donaghadee.

(3) Some of the ladies at Donaghadee.

(4) The party from Leeds: Mrs. Kemp, Mr. Kemp, Mrs. Hodgson, Mrs. Burns, Mr. Burns, Mr. Judge, Mr. Simon, Mrs. Judge, Mrs. Simon, Mr. Gough, Mrs. Peters, Mr. Peters.

(5) Mr. McBride, Armagh, and Mr. Usher, Guiseley.

(6) Mr. and Mrs. Armitage, Leeds.

(7) Mr. Walter Tate, Mr. David Warwick and Mr. H. F. Moore. They were apprentices together with the late Mr. W. J. Tate.

(8) The closing session—"breaking up."

(9) Leaving the Glens near Antrim. Extreme left, Mr. D. Warwick.

(10) Mr. J. B. Mitchell, Mr. Rowsell, Mrs. Skinner, Mr. Skinner, Mr. Parry and Mr. Fred Storey at Garron Tower.

(11) Preparing for the official photograph.

(12) The three Presidents: Great Britain, Northern Ireland, Irish Free State.

(13) The party from Wales.

(14) A Belfast group at Garron Tower.

(15) The English and Scots teams in play.

(16) On the bowling green at Portrush.

(17) Bowls Championship—England, the winners: Messrs. Anderson, W. S. Taylor, D. A. Desmond, A. E. Bradbury.

(18) Bowls Championship—Scotland: Messrs. P. Duff, W. S. Culbert, J. H. Tainsh, A. W. Hendry.

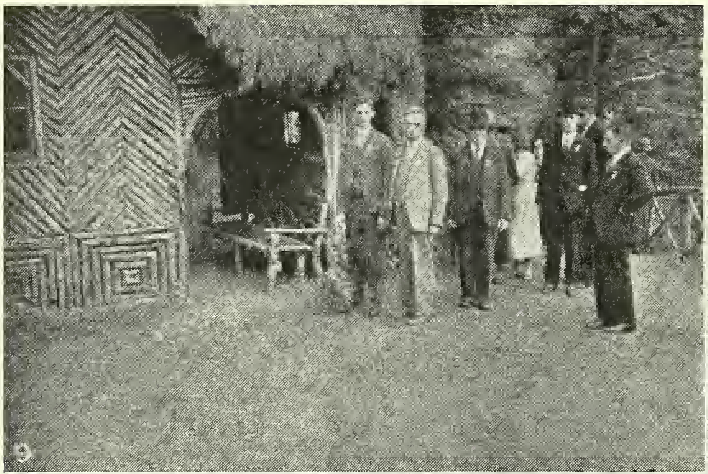
(19) On the putting green at Portrush.

(20) Mr. W. E. Phillipson, Manchester, the winner of the Edmund White trophy.

(21) W. E. Phillipson, Manchester, with Messrs. J. G. Twigg, W. Gray and A. N. Other.

BRITISH PHARMACEUTICAL CONFERENCE 1935

THE CONFERENCE EXCURSION


9

12

10

13

11

14

Who Were There

The following is the official list of visitors who attended this year's meeting of the Conference :—

Abernethy, C., and Mrs., Belfast.
Acheson, Dr. S. E. A., Belfast.
Adams, F. W., London.
Adams, Miss F. M., Belfast.
Adamson, W. J., Dublin
Alford, Miss F. I., Brentwood
Amson, T., and Mrs., Stoke-on-Trent
Anderson, D., London
Anderson, J., and Mrs., Dundee
Antcliffe, H., and Mrs., Sheffield
Appleton, J. T., and Mrs., Sheffield
Armitage, N. N., and Mrs., Leeds
Arnold, R. J., Exeter
Arnold, W. R. B., and Mrs., Exeter
Atkinson, J. W., and Mrs., Birmingham
Atkinson, W. W., and Mrs., Southampton
Aves, J. W., and Mrs., Manchester

Badger, S. S., and Mrs., Magherafelt
Bain, Miss M., Glasgow
Barron, W., Edinburgh
Bates, F. A., Nottingham
Barry, Miss R. J. W., Larne
Batten, Miss C. H., New Zealand
Beardsley, W. J., and Mrs., London
Bennet, R. H., Sydney, N.S.W.
Bennett, F. W. M., Arbroath
Bennett, R. R., and Mrs., London
Best, N., and Mrs., Bradford
Bilson, F. E., Bournemouth
Birnie, J., Hoylake
Black, A. S., and Mrs., Belfast
Blair, Wm., and Mrs., Belfast
Bowen, J. E., Aberdeen
Boyd, Dr. J., Belfast
Boyd, Miss K., Dublin
Boyes, Miss L. M., London
Boyes, G. R., and Mrs., London
Boyle, F. J., and Mrs., Belfast
Brackenbury, W. R., Middlesbrough
Bradbury, A. E., Dublin
Bradshaw, H., and Mrs., Huddersfield
Bream, Mrs. H. N., Leicester
Briggs, J. R. S., and Mrs., Sutton-in-Ashfield
Brindle, H., and Mrs., Manchester
Broad, H. C., London
Brown, E. Neville, and Mrs., London
Brown, H. E., and Mrs., Hessle
Brown, H. Treves, and Mrs., Hayes
Browne, F., London
Bryan, D. A., Penmaenmawr
Bryant, Dr. E. G., and Mrs., Birmingham
Buick, C. A., and Mrs., Port Glasgow.
Bull, B. A., & Mrs., Nottingham
Bullions, Mrs. H., and Miss P., Pelaw-on-Tyne
Burdett, F. E., and Mrs., Bradford
Burns, N. H., and Mrs., Leeds

Cahill, P., Dublin
Campbell, Miss M., Inverness
Cane, W. E., and Mrs., London
Canning, Miss C., Wallasey
Carlton, Miss E. A., Dundee
Carswell, Mrs. M. E., Belfast
Caughey, Miss, Comber
Chalmers, W., and Mrs., London
Chamings, A., Leicester
Clarke, Miss M. I., London
Clayton, F. A., Whitehaven
Clitherow, R., and Mrs., Liverpool.
Clubb, G. L., and Mrs., Liverpool
Cole, A. N., Youghal
Cooper, F. E., Weston-super-Mare
Conduit, F. J., and Mrs., Rickmansworth
Connor, J. E., Newry
Corran, Dr. R. F., and Mrs., Liverpool
Costello, J. F., and Dr. M., Galway
Cousley, H. J., Belfast
Coutts, Dr. J., London
Crossley-Holland, Dr. F. W., and Mrs., London
Crowe, J. E., Sheffield
Cubey, Mrs. R., and Miss, Blaydon-on-Tyne
Culbert, W. S., & Mrs., Airdrie

Darling, G. W., and Miss, Southsea
Davies, W. J., and Mrs., Swansea
Davies, J. C., Norwich
Day, J. T., Cardiff
Deacon, W., and Mrs., Bridgwater
Desmond, D. A., and Mrs., London
Desmond, D. W. A., London
Dixon, W. L., London
Dobie, Miss E., Birkenhead
Duff, Miss G., Glasgow
Duff, P. M., and Mrs., Glasgow
Duncan, Miss N., Burntisland
Dunsford, T. W., Torquay
Dwen, Mrs. R., Belfast

Edwards, R. I., and Mrs., Belfast
Elder, W. T., and Mrs., Aberdeen
England, Mrs. E., Belfast
England, H., and Mrs., Harrogate
Esler, Wm., Belfast
Etherington, L., and Mrs., Rochdale
Evans, G. W., London
Evans, J., and Mrs., Cambridge
Evans, Miss May, Cross Hands

Falding, W. B., London
Fasken, J., and Mrs., Dublin
Ferriday, A. J., and Mrs., Liverpool
Fielding, H. O., Belfast
Fielding, V., Belfast
Firth, F., and Mrs., Durban, S.A.
Fitch, W. K., London
Forrest, Miss E., and Miss L. M., Belfast
Forrest, S. H., and Mrs., Bangor
Forrester, G. P., London
Forster, N. E., and Mrs., Newcastle-on-Tyne
Foster, C. H., and Mrs., London
Foster, H. S., and Mrs., Carshalton
Foster, W. E., and Mrs., Coulsdon
Fox, C. W. N., London
Franklin, J. H., and Mrs., Salford
Freke, Mrs. A., London
Fyvie, A. M., and Mrs., Pietermaritzburg

Gamble, F. W., and Mrs., London
Gardner, S. R., Randalstown
Gatehouse, H. J., and Mrs., Cardiff
Gemmell, D., and Mrs., Beith
Gibson, S., and Mrs., Belfast
Gibson, T. A., Belfast
Gilmour, A. B., Glasgow
Gilmour, J. P., London
Godkin, A. A., Tunbridge Wells
Goldthorpe, J. R., and Mrs., Manchester
Goodall, J. E., and Mrs., London
Goodall, Miss E., Eastwood
Gough, J. H., Leeds
Gower, J., Llanelly
Graham, R., and Mrs., Glasgow
Gray, Miss, Dunstable
Gray, W., and Mrs., Walthamstow
Greenfield, H. H., and Mrs., Bournemouth
Greenfield, Miss A. E., Bournemouth
Greenwood, G. V., Lye
Groves, R. J., and Mrs., Belfast
Guiler, J. R., and Mrs., Belfast

Hale, G. L., Birkenhead
Hall, C. J., Belfast
Hallett, W. J., and Mrs., Bath
Hampshire, C. H., and Mrs., London
Hampson, Mrs. H., Buxton
Hanna, V. E., and Mrs., Dublin
Hannan, T. E., Bray
Harding, P. J., and Mrs., Dublin
Hare, Mrs. C., and Miss B., Birkdale
Harley, D., and Mrs., Musselborough
Harvey, Miss F. M., London
Haworth, H., and Mrs., Swinton
Haworth, Miss J., Swinton
Hay, Capt. J. J. G., London
Hay, Mrs. E. M., London
Hay, W. F., and Mrs., Aberdeen
Hayes, Miss D., London
Haynes, J. W., London
Hendry, A. W., and Mrs., Blantyre
Hill, J. R., Edinburgh
Hill, Rowland, Spennymoor
Hirst, H. M., Scarborough
Hodgson, H., and Mrs., Horsforth
Hodgkinson, Miss E., London
Hogg, S., and Mrs., Belfast
Holmes, A., and Mrs., Carlisle
Honneyman, Dr. W., and Mrs., Belfast
Howard, D. Lloyd, Ilford
Huggins, A. F., and Mrs., London
Hughes, M. S., Liverpool
Humphreys, Wm., and Mrs., Liverpool
Huxtable, C., Paignton

Irvine, P., and Mrs. P., London

Jackson, R. E., and Mrs., North Shields
James, T., London
Jamison, R. A., Belfast
Jenkins, Miss E. M., Dundee
Johnston, H., and Mrs., Belfast
Johnston, T. R., and Mrs., Manchester
Jones, A. J., and Mrs., Liverpool
Jones, D. T., and Mrs., London
Jones, H. H., and Mrs., Liverpool
Jones, L. W., Amlwch
Jones, Miss M. A., Llanrhystyd
Jones, S. C., and Mrs., London
Jones, T. W., London
Judge, J., and Mrs., Wakefield

Keall, J., and Mrs., London
Keaney, Misses A. J. and I. M., Manorhamilton
Kemp, W. F., and Mrs., Leeds
King, R., and Mrs., Comber
Kirkpatrick, D. L. and J. F., Belfast
Knott, W. W., London
Kopp, Miss H., London

Lander, N., and Mrs., Huddersfield
Lardin, P. D., and Mrs., Drogheda
Laverack, E. W., Malton
Laverty, Miss and Miss A. S. J., Belfast
Lewis, D., and Miss M., Llanrhystyd
Lescher, T. E., Liverpool
Lester, A. R., and Mrs., Cork
Lester, L. W., and Mrs., London
Linstead, H. N., and Mrs., London
Lockyer, J. E., and Mrs., London
Low, Miss J., Blackhill
Lyon, Mrs. T. Bonar, and Miss J. Bonar, Ayr
Lynch, Miss C. K., Hastings

McAllister, Miss M. C. M., Glasgow
McBirney, R. B., and Mrs., Belfast
McBride, A. C., Armagh
McCauley, S., Dublin
McCrone, R. M., Coatbridge
McCutcheon, W. J., and Mrs., Belfast
MacDonald, Mrs., Barrhead
McGregor, J., and Mrs., Belfast
McGregor, Mrs. M., Glasgow
McKenna, J., Belfast
McMullan, F., Belfast
McMullan, Sir T., Belfast
McNeal, J. F., Little Chalfont
McQuitty, H., Belfast
McRoberts, J. A., Belfast
Macauley, J., and Mrs., Belfast
Mallinson, G. A., London
Mann, Miss L. M., London
Manton, B. E., and Mrs., Crayford
Marns, T., and Mrs., London
Martin, Miss E., and Miss, Belfast
Martin, Wm., and Mrs., Belfast
Mawer, G. R. K., Wrexham
Mayne, A., and Mrs., Cork
Mayrs, Prof. E. B. C., Belfast
Meachim, Mrs., Southport
Meldrum, M., and Mrs., Ayr
Meek, H. O., West Bridgford
Michie, J., and Mrs., Bucksburn
Miller, H., Cheltenham
Miller, T., and Mrs., Manchester
Miles, J. H., Dublin
Mitchell, J. B., and Mrs., Edinburgh
Mitchell, J., and Mrs., Londonderry
Moffat, W. J., and Mrs., Glasgow
Moffatt, Miss J., Belfast
Moore, F. R., Belfast
Moore, H. F., Belfast
Mortimer, A., and Mrs., London
Mowat, D., Glasgow
Mumford, H. A., London
Murray, Miss M., and Mrs. L., Belfast
Murray, R. McD., and Mrs., Middlesbrough

Neathercoat, E. T., Horsham
Neve, H. C., and Mrs., London
Neville, R. A., Oxford
Newby, F., Oldham
Nicholl, J. T., Belfast
Nixon, H., Liverpool

O'Flanagan, Miss A., and Miss E. M., Dublin
O'Hagan, C., Newry
Owen, E., Bangor, Wales

Parry, L. Moreton, Liverpool
Patterson, Miss K. A., Belfast
Peck, Major E. Saville, Cambridge
Peters, A. L., and Mrs., Leeds
Phillipson, W. E., Manchester
Pickup, R., Blackburn
Powell, A. D., Beeston
Price, E. G., and Mrs., Chislehurst
Prior, J. S., Stamford

Rankin, I. G., and Mrs., Wargrave-on-Thames
Rankin, W. J., and Mrs., Belfast
Redfern, W. F., and Mrs., Stoke-on-Trent
Ringland, W. H., and Mrs., Belfast
Roberts, Miss I., Manchester
Robinson, E., and Mrs., Bradford
Robinson, G., London
Robinson, Miss K. E., Belfast
Robson, W., and Mrs., Gosforth
Rose, F. S., and Mrs., Croydon
Rowe, Miss, Essex
Rowland, G. H. C., Edinburgh
Rowsell, P. F., Exmouth
Rowsell, Miss, Yeovil

Scampton, V. J., Bournemouth
Scholes, W. I., Eccles
Scott, J. R., London
Seed, Miss E. F., Preston
Shaw, H., Belfast
Shepherd, A., London
Shepherd, F. W., and Mrs., Nottingham
Short, G. R. A., and Mrs., Edgware
Simmons, E. H., and Mrs., Salford
Simon, J. F., and Mrs., Leeds
Skinner, H., and Mrs., London
Skryme, E. W., Bexhill
Small, Prof. J., and Mrs., Belfast
Smart, H. S., Hull
Smith, A. Nutter, Nottingham
Smith, F., and Mrs., Birmingham
Smith, R., and Miss J., Stornaway
Southerden, F., Exeter
Spaanderman, J., and Mrs., Huthwaite
Sparshott, D. E., and Mrs., Nottingham
Steede, A., Belfast
Stiles, P., and Mrs., Market Harborough
Storey, A. H., Belfast
Storey, Fred., and Mrs. F., Belfast
Storey, Fred., Junr., Capt. J. W., Miss J., Miss M., and Miss Maureen, Belfast
Such, W. R., Dublin
Swinton, Miss A., Monkseaton

Tainsh, J. H., and Mrs., Edinburgh
Tate, Walter, and Mrs. E., Belfast
Taylor, S., Derby
Taylor, W. S., Enniskillen
Thomas, G., and Mrs., London
Thomas, H. N., and Mrs., Aberdare
Thomas, T., and Mrs., Cardiff
Thomas, T. W., Norwich
Tibbett, H. G., and Mrs., London
Toher, T. P., and Mrs., Sligo
Tomlinson, C. G., Audenshaw
Toy, H. G., and Mrs., Derby
Trevitt, V. L., and Mrs., Belfast
Tristram, W. J., Liverpool
Tucker, W. T., and Mrs., London
Tulloch, J. B., & Mrs., Ayr
Turner, A. E., and Mrs., Bullwell
Twigg, J. G., and Mrs., Hull
Tyler, B., and Mrs., Redhill

Unsworth, G. G., and Captain N., Altrincham
Usher, J. F., Mrs., and Miss F. M., Leeds

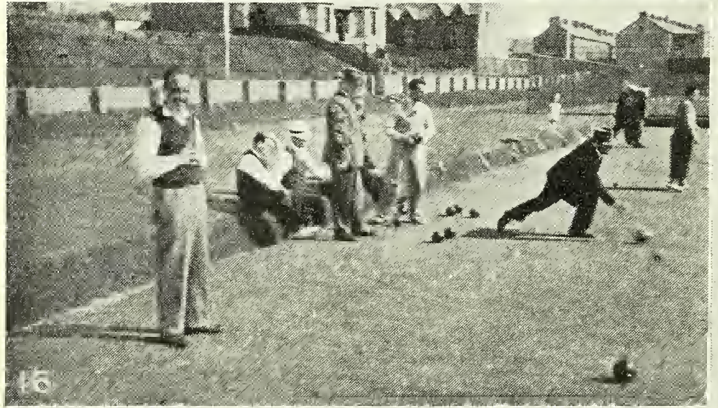
Walmsley, J. R., and Mrs., Manchester
Wandless, W. H., Whitehaven
Warner, H. L., Wolverhampton
Warren, P. H., and Mrs., St. Albans
Warwick, D., Dublin
Waters, J., and Mrs., New Zealand
Watkins, A. G., and Mrs., Maidenhead
Wells, F. G., and Mrs., London
Wells, W., and Mrs., London
Weiss, G. F., and Mrs., London
Whelehan, J. K., Mrs., and Miss K., Mullingar
Whitaker, J., and Mrs., Rotherham
Whyte, Miss M., Inverness
Widgery, E., Weston-super-Mare
Williams, D. J., and Mrs., Bath
Wilson, Miss E. M., Preston
Wilson, F. C., and Mrs., Bradford
Wilson, T., Mrs., and Miss J., Burntisland
Winch, Miss H. C. M., Sunderland
Woodnoth, P. H., and Mrs., London

Young, A. E., Mrs., and Miss F., Leicester
Young, C. W., Belfast
Young, J. C., and Mrs., London

BRITISH PHARMACEUTICAL CONFERENCE 1935

CONFERENCE SPORTS DAY AT PORTRUSH

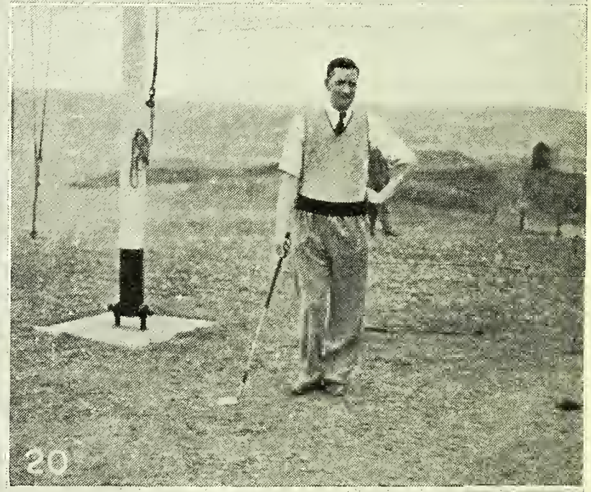
15


16

17

18

19


20

21

Pharmaceutical Society of Great Britain

Council Meeting

The most important matters introduced at the meeting of the Council of the Pharmaceutical Society, held at 16 Bloomsbury Square, London, W.C.1, on July 3, were discussed under the protection of the committee "flag," which meant that the Press could not report what was said. The president (Mr. E. Saville Peck), at the outset of the meeting, welcomed Mr. Noble back to the Council table. He added that the members of the Council knew the value of Mr. Noble's work and were glad to see him return. The receipt of apologies for absence from Sir Malcolm Delevingne and Mr. Dick was intimated. The president proposed resolutions in appreciation of the cordial reception and generous hospitality accorded to the British Pharmaceutical Conference by the Lord Mayor of Belfast; by the Prime Minister, the Deputy Prime Minister, the Minister for Home Affairs, and the Government of Northern Ireland; and by the Vice-Chancellor and Senate of the Queen's University of Belfast; and of the facilities in the Municipal Technical College for the meetings of the Conference afforded by the City Council of Belfast. It was also resolved that a message of warm gratitude for the excellent arrangements made for the entertainment and comfort of the Conference visitors and for the many kindnesses shown to the visitors during their stay be sent to the chairman, secretary and members of the Local Committee. The president said he could not remember any conference where those attending had been entertained in a more delightful way, and he was sure that all those who took part would be very grateful to Mr. and Mrs. Storey and to Mr. Kirkpatrick for the care they took in connection with the arrangements. The whole proceedings were a triumph of organisation. Both resolutions were carried with enthusiasm.

Tuesday's Proceedings

Among the business transacted by the Council at its meeting on July 2 were the following items:—

A letter was read from the Lord Mayor of London inviting the Society to subscribe to King George's Jubilee Trust. It was agreed that a subscription of £52 10s. should be sent.

The Council considered a memorandum from the Law Committee outlining certain principles which they considered might assist the Statutory Committee in dealing with complaints in disciplinary cases. The report was accepted by the Council, and was referred to the Statutory Committee with an invitation to a joint meeting should that be considered necessary.

The Council considered a report from the special committee dealing with the setting up of the Register of Premises, the amount of the premises retention fee and the appointment of inspectors. The report was adopted, and those proposals requiring approval were ordered to be sent to the Privy Council. It was agreed that the proposals should be made public when the views of the Privy Council were known.

Certain amendments to the by-laws consequent upon the setting up of the Register of Premises were read a first time.

Registration Items

Five persons were elected student-associates, and one student-associate was restored. Sixteen persons were restored to the Register. The registrar reported that 243 persons who had been removed from the Register had now been restored. The Council authorised the removal of a number of persons who had not paid the retention fee. The registrar reported that twenty-eight persons had been registered as apprentices or students.

Benevolent Fund

The report of the Benevolent Fund Committee showed that twelve applications had been received, and grants made ranging from £13 to £26. Special contributions amounting to £15 14s. were acknowledged.

Mr. Antcliffe said he would like to express appreciation of the work Mr. Beardsley had done for the Committee. He also mentioned the subscription of the London Chemists' Golfing Society, who had given the proceeds of the entrance fee of 2s. 6d. in connection with a competition. He hoped that other golf clubs would follow this excellent example.

War Auxiliary Benevolent Fund

The report of the War Auxiliary Benevolent Fund Committee showed that five applications had been considered during the month, and grants ranging from £5 to £26 had been made.

Establishment Committee

The report of the Establishment Committee mentioned a grant of £50 from the Government Grants Committee for the purchase of animals for research work.

Finance Committee

The financial statement showed that the receipts since the last meeting, including a balance of £4 19s. 5d., amounted to £16,379 14s. 1d., comprising the following items:—Retention fees, £299 5s.; subscriptions, £8 18s. 6d.; College—School of Pharmacy, £27 12s. 7d.; College—Pharmacological Laboratories, £369 2s.; registration fees, £100 16s.; restoration fees, £189; examination fees, £12,943 7s.; penalties and expenses, £69 6s. 6d.; interest on investments, £6 4s. 2d.; rentals, £20; "Pharmaceutical Journal," £1,637 13s. 5d.; Pharmaceutical Press, £682 5s. 7d.; telephone refund, £1 7s. 8d.; F.S.S.U. contributions, £19 16s. 3d. Payments ordered at the last meeting amounted to £7,241 4s., and £9,100 had been transferred to deposit account, leaving a balance of £38 10s. 1d. The balances on the other accounts were:—Benevolent Fund (current account), £41 16s. 5d.; Benevolent Fund (donation account), £21 15s. 3d.; War Auxiliary Benevolent Fund, £27 2s. 5d.; Hills Orphans Fund, £2 19s.; Orphan Fund, £35 6s. 3d. Accounts amounting to £10,644 13s. 3d. were passed for payment, and the action of the secretary in making payments amounting to £1,529 0s. 10½d. was approved.

Education Committee

The report of this Committee, submitted by **Mr. Rowsell**, stated that a letter had been received from the Registrar of the Victoria University of Manchester announcing that Mr. James Grier, Senior Lecturer in Pharmacy, would be retiring in September. Among other matters the Committee had considered applications for approval of full-time courses of instruction for the Preliminary Scientific examination. It had been decided to add Liverpool and Plymouth to the list of centres for the written examinations in 1936, the former for all examinations and the latter for the July examinations only.

Law Committee

The report of this Committee, presented by **Mr. Beardsley**, stated that in England and Wales, since the last report, 1,067 shops have been visited; of these 668 were chemists' shops. In all the chemists' shops certificates were exhibited. At eleven of the remaining 399 shops visited certain infringements of the Pharmacy Acts were reported. In Scotland, since the last report, sixty-three chemists' shops have been visited, in all of which certificates were exhibited.

Near East Fair.—It has been announced by the president of the Levant Fair that foreign Governemnts participating are to be asked to organise their exhibits in a permanent form. At the recent Fair 5,000 exhibitors took part, representing forty-one nations.

Changes of address.—Subscribers are requested to note that in all advices of this kind it is necessary to have both the old and new address, as our lists are kept alphabetically by towns in order to meet with the requirements of the postal authorities. Such advices should reach us not later than the first post on the Wednesday morning prior to going to press with the issue which it is desired to divert.

The Forty Days

By a Special Correspondent

THE time available for criticising and revising the proposed Poisons List and Rules is short, the period expiring forty days after June 18. Obviously this period is all too brief unless it be at once admitted that the suggested statutory changes are free from objection. Unfortunately this is far from being the case. Indeed, they bring out the inherent weakness of the Pharmacy and Poisons Act, 1933, namely, that it provides the means to defeat its own original intentions. Attempts at poison control in the past have failed because they did not reach their real objective. Consider the Dangerous Drugs Acts. Despite international co-operation the illicit traffic in narcotics persists, and has resulted in transferring their manufacture to countries where the conventions of the League of Nations do not apply. Objective and achievement are thus decidedly at variance, as law-abiding citizens and reputable traders suffer drastic restrictions under the threat of savage penalties while evasion of the law pays a premium sufficient to create a new class of criminals.

An "Elastic" Act

The report of the Poisons Board clarifies the future position of poison control sufficiently to reveal similar possibilities. It would seem that the Act is regarded by the Board as an elastic rather than a binding measure in formulating its rules. The Board arrives at the conclusion that the Poisons List should include those substances with toxic properties which present a real and practical danger to the public ; it also recognises that the new statutory regulations should facilitate the detection of crime. The Board is aware that the poisons registration as laid down in Section 18 (2) of the Act would not apply to Part II poisons. Nevertheless the Board includes in Part II of the List poisons which it describes (Report, p. 20) as "being notoriously liable to be employed by the poisoner." This procedure affords a direct contradiction to the actual terms of the Act, but the necessities of "common use" (Section 17 (3)) are deemed sufficient excuse for permitting listed sellers to distribute poisons of the properties of which the Board admits they must be ignorant.

The question arises whether it is possible for Rules made under Part III of the Act to override the requirements of Part II of the Act. Section 18 (1) is explicit on this point, as it begins with "Subject to the provisions of this Part of the Act, it shall not be lawful." There can be no doubt as to the intention of the Board to initiate poison legislation by regulation. The powers invoked for this purpose are those granted under Section 23 of the Act, which permits Rules to be made by the Secretary of State applicable to any class of poisons or to any particular poison. It is true that Section 18 (2) also provides for relaxation or extension of poisons registration by rule, but it is equally certain that Section 18 (1) does not permit any change in the scope of Part I poisons such as superseding Part I of the Poisons List by the First Schedule to the Poisons Rules. However, the Board prefers to go even further and use Rules under Section 23 to "exempt" listed poisons from the provisions of the Act. Undoubtedly the "Miscellaneous" provisions in Part III of the Act are of an omnibus character in regard to anything in the Act to be prescribed by Rules, but Part II defines poisons in terms not subject to Rules except as regards registration of the sale of poisons. The attitude taken up by the Board in legislating by rule modifies the interests of authorised sellers of poisons in two respects:—

(1) Restriction by prescription entails additional burdens on the pharmacist without any compensatory advantages, and may result in hypnotics assuming a prominent place in the illicit traffic in drugs.

(2) Exemption will lead to demands for further concessions and competition in domestic remedies of alleged "harmless" character.

Pharmacists would be wise to urge that the Poisons List be made specific by definition in accord with Part II of the Act, instead of being uncertain by rule. The real danger consists in allowing the Poisons List and Poisons Rules to become law by default.

The Board is well aware of the difficulties of defining a poison, but it complicates the issue by making Rules in this respect not contemplated under the Act. Section 17 (2) states that "Part I of the List shall consist of those poisons which, subject to the provisions of this Act, are not to be sold except by a person who is an authorised seller of poisons." Section 18 (1) (*a*) confirms this right subject to certain provisions of Part II of the Act. Registration under Part I of the Act carries with it the restriction of the sale of poisons in Part I of the List to registered pharmacists. Any claim to modify such definition by rule is contrary to the spirit and intention of the Act. Pharmacists must insist that inclusion of a poison in Part I of the List is the sole specification of its character, i.e., if public necessity makes restriction to Part I undesirable in the case of any poison, then the proper course is to exclude it from Part I of the List. The rule must be that a Part I poison cannot be converted by rule into a "non-poisonous" substance.

The Pharmacist's Microscope

By S. E. Dowdy, M.P.S., F.R.M.S.

MANY pharmacists who possess microscopes would revive their interest in the instruments if they knew of a suitable line of study. Ordinary observation of ready bought slides quickly palls and it is only systematic use and investigation into some of the marvels of Nature that can foster a real revival of the attractions of microscopy. There are several fields of work well within the scope of a chemist's training. Among these might be instanced experimental work in connection with some of the newer aniline dyes, including observations on their staining properties on various tissues, also the suitability or otherwise of solutions of such dyes in the preparation of colour filters for use in micro work. It is well known of course to most microscopists that problems of resolution and definition are intimately connected with the use of light of different colours or wave-lengths, and it is possible that variations of liquid filters may lead to better visual results in the future. Micro-analysis would provide another fruitful field for study. Here new tests might be devised or old ones improved upon. Such tests may prove of enormous importance, especially in the detection of crime or where the amount of material at the investigator's disposal is limited to very minute amounts. This branch of applied microscopy is closely allied to the study of micro-crystallography, which again will provide any amount of work of a congenial nature carried out with material to be found in any pharmacy. Still another line of home research work is in the combined use of the microscope and spectroscope. A few chemist microscopists possibly possess micro-spectroscopes, and such could be profitably utilised in the mapping out of spectra of hitherto unobserved specimens. Such results have practical applications in the detection of adulteration where chemical methods may completely fail. It is known of course that the detection of extremely minute amounts of blood can be safely left to the micro-spectroscope to detect, but there is still room for research in the direction of proving the identity of blood from various sources. The pharmacist's microscope need not keep him from much needed outdoor recreation. It may be made the excuse for rambles with a definite object in view. For there still exists the need for more light on the life history and metamorphosis of the organisms to be found in every pond or river. The same remark applies to the seaside resident in connection with studies of marine fauna. What is really needed to maintain interest in one's microscope is concentration on one branch of microscopy at a time. For example, the writer devoted the spare time of one winter to micro-crystallography, that of another to mastering the elements of bacteriology, and the spare hours of a third to section cutting and mounting.

Hospital Pharmacy and the Draft Rules

By "Hospitaller"

HOSPITALS have always enjoyed the not unmixed blessing of comparative immunity from the legal provisions relating to the actual vending of poisons; and it is not, therefore, unexpected that for these institutions a very considerable degree of exemption from the regulations is contained in the recently issued report of the Poisons Board. The hospital pharmacist, of course, appreciates his freedom from restrictions and procedures which, in view of the large number of prescriptions comprising his daily total, would be excessively irksome, if not practically impossible to abide by. Nevertheless he has always regarded it as a curious and dangerous anomaly that, whereas for dispensing—legally regarded as the sale of—poisons on retail premises qualified control is required, no such provision exists in the case of the hospital, where, in view of the greater volume of pure pharmacy, such control is especially desirable. In other words, so far as the statutory requirements are concerned, the hospital lags half a century or so behind the retail shop.

In all the first-class hospitals a pharmacist is, of course, always appointed to take charge of the dispensary, and in some cases the rules of the institution insist upon the pharmaceutical chemist qualification. It is equally true, however, that, in many of the smaller institutions, either from false notions of economy, or in ignorance of the importance of the pharmacist's work or of the nature of his qualification, no such regulation exists, and persons possessed of no legal qualification are appointed. One cannot but feel that it is principally in institutions where this type of practice is adopted that the following paragraph from the Draft Rules applies: ". . . we have reason to believe that the conditions prevailing in some [hospitals, etc.] are not so satisfactory and that serious accidents from time to time occur through a laxity of supervision and insufficient care." The Poisons Board has not seen its way clear to stipulate that a pharmacist shall be in charge of dispensing, but the proviso contained in Section 27 regarding the control of the manufacture of pharmaceutical preparations would appear to constitute a great forward step. The phrase, "the manufacture of pharmaceutical preparations," must embrace the compounding of prescriptions, and, in practice, this cannot fail to ensure the eventual appointment of a pharmacist to every hospital. It is not uncommon to hear of various institutions that the doctors do the dispensing—a statement which, in the majority of cases, means that the actual work is done by a nurse or even an experienced porter! When the present rules are implemented, failing a pharmacist a member of the medical staff *in full-time service* at the hospital will have to take personal responsibility for work of which, in the majority of cases, he has only the scantiest knowledge. Hospital pharmacists may well feel that this is a decided gain in their long fight for the recognition of the importance of their work and the value of their services.

Records

As far as the principal hospitals are concerned, little or no change is likely to be necessitated by the specially modified rules for hospitals relating to the keeping of records. In some institutions, however, it has been the practice to permit medical "casualty" patients who are not sufficiently ill to require admission to a ward, or even prolonged out-patient treatment, to retain the prescription-card issued and bring it with them should a subsequent visit for further medicine be necessary. This custom will, of course, need modification. It will be necessary either for the hospital to retain and file the cards or for a copy of the prescription to be made, together with the name and address of the patient and the name of the prescriber. In certain dispensaries devoted entirely to out-patient work it has been customary to allow the patients to retain their case-sheets, thus avoiding the labour and expense of filing systems. There is no doubt that the new regulations will render this practice entirely illegal. Whether a prescription-register or a filing system should be adopted will have to be the concern of the individual institution; certainly one or another of these methods will be required.

Storage of Poisons

It is highly unlikely that the new Rules will affect the majority of hospitals in regard to the actual storage of poisons, except perhaps in certain minor details. The sound practice of storing poisons either in a specially provided cupboard or else in containers "distinguishable by touch" has been largely observed—to some extent, I may add, owing to the good offices of the wholesale druggists who make a practice of selecting suitable containers for the preparations which they send out. Furthermore, it is the custom in a number of hospitals for the pharmacist to make a periodical inspection of ward drug-cupboards; this matter of inspection will, for the future, be a legal requirement, and the fact that he is a person legally required and entitled to inspect the secret drug-receptacles of the ward sisters should add a little to the standing of the pharamacist within the institution.

Form of Containers

The Board has amplified the older phrase of "distinguishable by touch," so that we know the container must be "fluted vertically with ribs or grooves recognisable by touch" on its outer surface. This is a closer definition than that contained in the older regulations, and it was rendered necessary by the Court decision, given some two or three years ago, that a six-sided catsup bottle conformed to the requirements of the then existing regulations. It will be noted that the new stipulation relates only to bottles of a capacity below 120 fluid ounces; hence irrigation jars and the like, which are usually placed on a shelf in the operating theatre and may contains such substances as mercury potassium iodide solution, are not included. It is evident that the Board has taken some practical advice from a hospital source.

These notes and remarks arise from a preliminary study of the new Draft Rules, and as time goes on fresh points may obtrude. Initially, however, one must feel that on the whole the pharmacist in hospital practice has nothing whatever to complain of, and may indeed find that implementation of the requirements of the Board will strengthen his position within the hospital.

"Ultra-Sounds"

Their Influence on Certain Physico-chemical Properties

THE term "ultra-sounds" is given to waves having a frequency greater than 20,000. Crystals of quartz are used to propagate waves of sufficient intensity, the energy of "ultra-sounds" being generally measured by their thermic effect. The chief use of "ultra-sounds" is in the preparation of colloids, enabling liquids which ordinarily do not mix to be finely dispersed. To obtain the dispersion of one body in another, the surface of separation of the two liquids is placed at right angles to the direction of emission of the ultra-sounds. By this method, it is possible to obtain a complete series of colloids without recourse to electrolytic phenomena in any way. Thus metallic alloys of low melting-point, as well as mercury, can be dispersed in water, alcohols and glycerine, and sodium, potassium, and alloys of these metals, in liquid paraffin.

Other effects of "ultra-sounds" are the expulsion of gases dissolved in liquids, the lowering of boiling-points of pure substances and the speeding-up of crystallisation in certain cases. Hydrolysis, oxidation of potassium iodide, and depolimerisation of gum arabic, gelatine and various condensation products of formaldehyde, are further applications of "ultra-sounds." On the ground that they generate heat, even in the interior of bones, "ultra-sounds" have been suggested as likely to be beneficial in certain therapeutic treatments.—"Journal de Pharmacie de Belgique."

Insurance Dispensing News and Notes

Record of matters concerning Chemists' interests in the National Health Insurance Acts

Local Reports

ENGLAND

London.—The following statistics, taken from the annual report of the London Pharmaceutical Committee, show a decline of nearly 140,000 in the mean number of insured persons from 1933 to 1934.

Year	Number of Prescriptions	Total Value	Mean Number of Insured Persons	Average Number of Prescriptions per Insured Person	Average Cost per Insured Person
		£ s. d.			d.
1929	8,940,870	294,911 14 10	1,839,161	4·85	38·48
1931	8,510,255	270,524 11 7	1,904,521	4·47	34·09
1933	8,805,891	284,919 17 10	1,923,400	4·58	35·55
1934	8,482,787	275,446 0 3	1,786,500	4·75	37·00

The report also lists the following articles disallowed as medical benefit, but paid for by the Committee and the cost recovered from the medical men concerned:—(*a*) *Appliances* (547 *prescriptions*): Air cushion, arch supports (disallowed after August), arm slings, bandages and dressings (non-scheduled), supra-pubic catheters, corn pads and adhesive felt, douches (large), douches (eye and nose), elastic hosiery, elastic plaster dressings (non-scheduled), eye shades, finger and thumb stalls, funnels, hypodermic syringes and needles (not for insulin), inhalers, atomisers, sprays, etc., litmus paper and measures (glass), pessaries (not ring), safety pins, syringes (all kinds), sutures (sterile), temperature charts, thermogene or capsicum wool, clinical thermometers, trusses, tubes and rods (glass), tubes (rubber), tweezers, wrist straps. (*b*) *Preparations* (54 *prescriptions*): Arrowroot, Benger's food, casein powder, charcoal biscuits, iodised salt, Ovaltine, peptonising powders, prepared barley, rennet tablets, Roboleine, saccharin tablets, soda water, tragacanth powder, Virol, Vitalia. In this connection it is a point of importance that where unauthorised articles are ordered but not supplied the prescription should be marked with the words "not supplied." This avoids possible complications later.—A meeting of the Committee was held on June 18 Mr. H. Skinner (chairman) presiding. Referring to the death of Mr. P. A. W. Self, of Harrison & Self, the chairman paid a high tribute to the work of Mr. Self in connection with the British Pharmaceutical Codex. Comparative figures for the months of April 1934 and April 1935 showed that total number of prescriptions had increased from 731,530 to 738,265, and the total cost from £23,644 to £24,028. The Chemists' Service Subcommittee reported particulars of seven cases dealt with under the testing scheme for the month of May, concerning which five chemists were censured and two cautioned.

Portsmouth.—During February the cost of drugs was the lowest for some years, £1,065. The script frequency was 0.1d. up, in spite of the fact that at the last count of the register the number of insured persons had increased by over 900 compared with a year ago. The annual report of the South-Eastern Joint Committee for Pricing Prescriptions shows that during 1934 340,864 prescriptions were priced for the Portsmouth Insurance Committee at a total cost of £12,242, the average total cost per insured person being 35.7d. The South-Eastern Pricing Bureau recently drew the attention of the Portsmouth Insurance Committee to the large and increasing number of 12-oz. mixtures ordered by insurance practitioners, and expressed the opinion that it led to considerable waste.

Staffordshire.—At a recent meeting of the Staffordshire Insurance Committee it was stated that the number of prescriptions dispensed by chemists during the year was 1,015,333, against 987,238 in the previous year. In addition 32,215 insured persons obtained medicine from their doctors.

Warwickshire.—The Warwickshire Pharmaceutical Committee met at Leamington recently. The Pharmaceutical Service Subcommittee reported that several tests had been made, but the analyst's certificates were such that there had been no necessity to call the Committee together. The result of investigation of prescribing showed a further increase in frequency.

West Midlands.—The Clerk to the Herefordshire Insurance Committee has submitted a comprehensive report on the working of the West Midland Pricing Bureau. He remarked on the high degree of accuracy of the Bureau. The Bureau priced altogether 4,500,000 prescriptions last year, the total number from Herefordshire being 98,499, at a cost of £3,375.

West Riding.—At a meeting of the West Riding of Yorkshire Insurance Committee, on June 27, the clerk reported that the Pharmaceutical Service Subcommittee had investigated the case of an insurance chemist who had failed to inform the committee that the qualified chemist at one of his two shops had left his service. It was decided that he had committed a breach of the regulations and that he be fined £5.

Notes and Queries

The following are answers to some of the questions that may arise in any pharmacy in connection with National Health Insurance dispensing

Choice of chemist.—The insured person may take his prescriptions to any chemist he selects from the panel list published by the Insurance Committee for his area. In no circumstances should a practitioner recommend to his insured patients one chemist in preference to another. Insurance and pharmaceutical committees look with disfavour upon such prescriptions as "Lin. Stim. (Blank's)" or "Neighbour's Healing Ointment," when the name mentioned is that of a chemist in the doctor's own locality and the preparation is a proprietary of that particular pharmacy. By the Panel Committee the recommendation of a particular chemist by a doctor for the dispensing of insurance prescriptions is considered to be improper, and, although such recommendation is not prohibited in definite terms by the Regulations, it is contrary to the principles expressed in the scheme, and the Insurance Committee would soon take steps to stop the practice if a complaint by another chemist or by the pharmaceutical committee could be substantiated. It must, however, be recognised that the doctor is responsible for the patient's treatment; and if he wishes the insured person to begin the use of some particular drug or preparation as soon as possible it would not appear to be unreasonable for him to say to his patient: "There is a prescription for medicine that I want you to start taking soon. I cannot recommend any particular chemist to you, but if your usual chemist has not this in stock I know you can get it at Blank's."

Revision of Terms.—The terms under which chemists take service with insurance committees for the dispensing of insurance prescriptions are agreed upon between the National Pharmaceutical Union and the Ministry of Health on a national basis. When such terms are to be modified, discussions take place between the two parties; and if the alterations proposed are considerable, the Union generally calls together representatives of the Pharmaceutical Committee throughout the country in conference before coming to an agreement with the Ministry. Each local insurance committee is nominally responsible for making terms with the chemists in its own area (after consultation with the local pharmaceutical committee); and when minor local alterations are effected in this way the insurance committee is required by the Regulations to give three months' notice of any such change in terms of service to each of the chemists on its list. Generally, however, the alterations that are made in the terms of service are agreed upon centrally by the Ministry and the Union, and apply to the whole country. In such a case it is not necessary for each local insurance committee to consult the pharmaceutical committee in its own area. In some cases, however, the Minister of Health may direct insurance committees to notify the proposed changes to the local pharmaceutical committee in lieu of notifying every individual contractor in the area.

Chemistry Research Board

THE first report of the Chemistry Research Board, covering the period ended December 31, 1934, has been issued (price 1s. 6d.) by the Stationery Office. The historical introduction contributed by the Director of Chemical Research (Professor G. T. Morgan, D.Sc.) shows that the work of the Department of Scientific and Industrial Research (of which the Board forms a part) began in 1915, and during the ensuing ten years the Department had at various times become interested in investigations of a chemical nature, such, for example, as large-scale researches on the chlorination of methane, large-scale researches on the production of formaldehyde, investigations on the production of glycerin, investigations on the manufacture of chemical products from fish residues, general researches on the corrosion of metals, general researches on high-pressure reactions, and researches connected with the deterioration of fabrics. In 1924 the building of a chemical laboratory was commenced on a site near the National Physical Laboratory. The staff now numbers seventy-five, including four workers connected with industrial organisations. Although the Laboratory is not a teaching institution in the academic sense of the term, facilities have been afforded for chemists of approved qualifications to work in the Laboratory in order to acquire some special technique. In the following paragraphs we indicate the contents of the sections which are of direct interest to our readers. The investigations are illustrated by structural formulæ and other data in the report.

Chemotherapy

When the chemotherapy group of workers was constituted, the initial programme comprised the synthesis of symmetrical carbamides of the Bayer 205 type, with a view to the preparation of compounds which might possess trypanocidal activity. During this time an investigation of certain organic antimonials had also been in progress. This addition to the original programme was regarded primarily as an attempt to prepare Brahmachari's antimony analogue of tryparsamide. When repetition and variations of this investigators' own method of preparation gave impure products, the problem as originally defined was not pursued any farther, but work proceeded on the closely related *m*-aminophenyl-stibinic acid. Of the compounds derived from the latter acid, however, only one—4-hydroxy-3-acetamidophenylstibinic acid had any definite action. Three isomeric quinoline-stibinic acids were intended for a further extension of the work, but they themselves were of no therapeutic value. When the symmetrical carbamides of the fluorene series were found to be without activity it was thought that the introduction of arsenic into the fluorene molecule might prove effective. A number of arsenic acids of fluorene, fluorenone and fluorenol have been isolated. Some of them possess trypanocidal activity, several are definitely curative, but there has been no indication of any tendency towards enhanced activity which would seem sufficiently marked to merit further prolongation of their study. An investigation which has yielded promising results includes two new series of quinquevalent arsenic compounds.

Synthetic Resins

A considerable portion of the section devoted to synthetic resins reviews previous work and brings it up to date. The following paragraphs are typical:—

Oil-soluble Resins.—While it is known that resins prepared from tar acids boiling from 217-225° (xylenol range) are compatible with drying oils, experiments have now shown that phenols boiling up to, and above, 300°, are also applicable, although oil varnishes prepared from these higher phenols exhibited indifferent drying power. Methods devised to ensure freedom from unattached phenols, such as steam distillation at temperatures up to 200°, have indicated that this slow drying is at least due in part to the presence of free phenols, which are not entirely removed by steam distillation *in vacuo* below 100°.

Of authentic phenols it was found that *p*-ethylphenol and thymol readily yield oil-soluble products. Carvacrol and *o*-ethylphenol condensed very slowly with formalin in the presence of acid, and only the resin from the latter phenol was soluble in oils.

Products from Polyhydric Phenols.—Polyhydric phenols readily combine with formaldehyde in presence of acid to form amorphous, almost insoluble powders having high decomposition points. These materials are still under examination, since they have distinctive adsorption capacities for many metallic cations, and particularly for iron and calcium. The resorcinol condensation product has bactericidal potency towards *B. coli communis.*

Dental Investigation

The main dental research problems under investigation during 1934 have been:—(1) The production of a non-metallic substitute for vulcanite for denture purposes. (2) The production of an adhesive material for use as (*a*) a lute for securing inlays and crowns to the natural tooth, (*b*) a cement for filling cavities in the natural tooth. A laboratory examination of all proprietary denture base materials at present available on the British market has been continued, and a comprehensive survey of these materials is in course of preparation. Examination of the following plastic materials has been made with a view to their possible application for dentures:—Styrol, vinyl acetate, glyptal and ketone-formaldehyde resins, and benzyl cellulose. Of these materials styrol resin appears to be by far the most promising. Attention has been devoted to the particle size and particle size distribution of dental cement powders, which have an important bearing on the powder: liquid ratio that may be used and therefore on the limit of strength, and other properties of the set cement. Some classes of synthetic resins, notably modified glyptal resins, have been studied with a view to applying their adhesive properties in this connection.

Other Research

The sections of the report other than those we have mentioned deal with corrosion of metals ; high pressure research ; tar research ; water pollution ; microbiology ; road tar ; chemical engineering. There is also a section headed "General Research," most of the paragraphs in which are concerned in the first place with scientific chemistry. The introductory statement of the Board mentions that a policy of co-operation with the Medical Research Council is being pursued. A bibliography is appended to the report.

Wills

Mr. William Leggett Egerton, 3 Alcerstone Road, Portsmouth, chemist and druggist, who died on January 9 last, aged 65, left estate gross value £3,907, with net personalty £2,505.

Mr. Frederic John Brett, 20 Springfield Road, Leicester, chemist and druggist, who died on February 21 last, aged ninety-one, left estate gross value £3,215, with net personalty £1,499.

Mr. Alexander Leslie Strachan, 82 Beaconsfield Place, Aberdeen, a director of Davidson & Kay, Ltd., chemists, who died on April 30 last, left personal estate in Great Britain valued at £13,220.

Mr. Alfred Dudley Ashby Gale, 36 Fairdene Road, Coulsdon, Surrey, and 15 Bouverie Street, E.C., manufacturing chemist, who died on April 16 last, aged fifty-four, left estate gross value £9,315, with net personalty £7,835.

Mr. Sidney James Edwards, 14 Haslemere Avenue, N.W., managing director of Castle Huskisson, Ltd., manufacturing chemists, who died intestate on April 1 last, aged sixty-nine, left estate gross value £1,186, with net personalty £1,091.

Mr. Herbert Knott, Willow Bank, Ivy Bank Road, Astley Bridge, partner in the firm of Knott Bros., chemists and druggists, who died on January 3, aged sixty-six years, left estate gross value £6,621, with net personalty £6,534.

Mr. William Frank Young, The Parade, Liskeard, Cornwall, chemist and druggist, Mayor of Liskeard in 1923-25, and again in 1932, who died on March 8 last, aged sixty-three, left estate gross value £14,418, with net personalty £11,793.

British Chemicals in the Argentine

THE annual report for 1935 on the economic conditions in the Argentine, compiled by H.M. Commercial Counsellor at Buenos Aires and published by the Department of Overseas Trade* contains a good deal of useful information as to the demand for chemicals of all descriptions, patent medicines and specialities, perfumery and toilet preparations, sheep and cattle dips, etc. Particulars are also given of the types and classes of these goods required for this market and the competition which British manufacturers have to meet. An agreement between the Governments of the Argentine and the United Kingdom provides for the allocation of exchange by the former for the purchase of U.K. goods proportionate to the value of goods shipped from the Argentine to the United Kingdom. For the twelve months to June 1934, United Kingdom imports from the Argentine totalled £42,770,000, while our exports amounted only to £11,881,000, giving a balance in favour of the Argentine of £33,748,000. The following are extracts from the report:—

Pharmaceutical Chemicals

There has been a decided increase in imports of United Kingdom drugs, due chiefly to the fact that manufacturers in England have been able to supply, at competitive prices, a number of lines hitherto made by continental houses only. It is believed that this new trade, which has been helped by the exchange facilities enjoyed by United Kingdom manufacturers, could be expanded still further by increased activity. The local manufacture of specialities is steadily developing and the makers of medicinal preparations no longer care whether the drugs used are of a continental or a United Kingdom brand provided that their price and quality are acceptable. Mention is made of this fact because it was the practice in the Argentine wholesale and retail drug trade for many years to specify German or French drugs ; for instance, most retail druggists would not sell or use any potassium iodide not of French make, nor any bismuth unless it had a German mark. To-day, however, hundreds of different drugs and chemicals of United Kingdom origin are to be seen on the shelves of the large wholesale distributing chemists. One German house has a large depôt in Buenos Aires and sells drugs and chemicals from local stocks, while another German concern, who extended their premises in 1934, also sell large quantities of drugs from depôt stock. The same may be said of a Swiss concern, which has made considerable headway in recent years. Down to the present, competition from Japanese manufacturers has been negligible.

There is a valuable business with government departments and other public authorities, in which marks or brands are of little consequence, price and quality, especially price, being the decisive factors. The purchases are generally made from Europe through representatives in Buenos Aires after calls for public tenders have been issued locally, quotations having to be c.i.f. and in Argentine paper pesos. It is estimated that the municipal hospitals (Asistencia Pública) alone buy imported drugs to the value of well over a million pesos a year, in addition to buying urgent requirements in the local market. The business in scientific laboratory chemicals, which was formerly monopolised by German suppliers, is now being shared by the United Kingdom, orders having been placed in that country by the universities and some of the leading druggists.

Proprietaries and Specialities

It is estimated that some 20,000 lines of patent medicines are on sale in the Argentine market, mostly made up in the country. The largest overseas suppliers are the French and German manufacturers ; the Americans, however, are making headway. No new English patent medicines or medicinal specialities are known to have been introduced in 1934. A big share of the business goes to local laboratories owing in part to the fact that they are frequently owned by medical men, or by small private concerns who pay a premium to the medical profession to have their products prescribed. Due to the high duties, moreover, nostrums produced in these laboratories are being offered at about half the price of the imported articles. Aspirin tablets of local German or Argentine manufacture are sold in large quantities and considerable sums are spent in advertising the two most popular brands. For instance, one German house has a fleet of twenty-five cars canvassing pharmacies in Buenos Aires alone. The principal American manufacturers of patent medicines also have large branch houses in Buenos Aires, manufacturing and packing locally in order to avoid the heavy customs duties. United Kingdom houses in general appear to be adverse to this policy. One, however, recently arranged for its products to be packed locally with most encouraging results, and if others would follow this example they would undoubtedly obtain an increased share of what is quite an important trade. The Argentine Ministry of Health now grant approvals more speedily than formerly and authority to sell a new line can be obtained within ninety days provided that the product complies with the law prohibiting any exaggerated or incorrect statements on the label or the formula. The financial standing of the leading druggists is generally considered good. Imports of prepared medicines during 1933 were valued at 4,827,000 paper dollars and for the first six months of 1934 at 2,544,000 paper dollars.

Perfumes and Toilet Requisites

In spite of the general tendency of the trade in imported perfumery and toilet requisites to decrease, the sales of old-established United Kingdom lines have improved. And there is every indication that these lines are becoming more popular, with the help of prominent advertisements in the numerous European and American publications which circulate in Argentina. Another factor, possibly no less important, has been the exchange position. In view of the severe local competition, however, it is doubtful if a new range of United Kingdom perfumery and toilet requisites would meet with much success in this market. For the same reason the importation of perfume extracts is small. Among such as are imported, a preference is shown for French brands.

Cattle and Sheep Dips

The trade in sheep dips is still mainly in British hands, and no foreign competition of any importance has arisen. Consumption has decreased somewhat, due to economic conditions, and there is a tendency to use cheap substitutes manufactured locally. All approved dips are admitted free of import duty. A German cattle dip was introduced on the market in 1934, but has so far met with little success. Future prospects for British-made dips depend on the trend of the wool market as regards sheep dips, and on the decision of the Ministry of Agriculture (Argentine) as to the degree of dilution of cattle dips.

The total value of imports of chemicals and pharmaceutical substances and products, oils and paints during 1933, was £6,200,000, of which £1,616,000 or 26 per cent. was of United Kingdom origin ; £1,330,000 or 21 per cent. was of United States origin ; £1,213,000 or 20 per cent. was of German origin and £493,000 or 8 per cent. was of French origin.

HOMŒOPATHIC "PETROLEUM" FOR SEA-SICKNESS.—" A dose of petroleum in the dilution of ' one over one and sixty noughts ' given before a journey completely stopped all symptoms, and a subsequent dose some time later provided immunity."—From " The Times " report of the recent British Homœopathic Congress.

A SEED EXCHANGE.—" It is not perhaps generally known that for the past thirty years there has been in connection with the South-Eastern Union of Scientific Societies a seed exchange, conducted for many years by Mr. B. T. Lowne. The latest list contains 127 British and nineteen alien plants, and over 300 packets of seed have been distributed."—" The Times."

LABORATORY AT THE NATIONAL GALLERY.—A physical laboratory for the examination of pictures has been installed at the National Gallery, Trafalgar Square, London, S.W.1. The equipment consists of four distinct but complementary appliances: —(1) An *x*-ray plant ; (2) an ultra-violet lamp with daylight comparator ; (3) an infra-red tungsten lamp ; (4) a microscope, including camera, for the examination of opaque surfaces in polarised light.

---

* Stationery Office, price 4s. 6d.

Trade Report

Where possible scales of prices of chemicals are given for bulk down to small quantities. Prices recorded for crude drugs, essential and fixed oils and coal tar products are for fair sized wholesale quantities. Qualities of chemicals, drugs, essential and fixed oils, etc., vary, and selected brands or grades would be at higher values.

28 Essex Street, W.C.2, July 4

The general tone in the markets continues fairly steady, while the volume of business being transacted is somewhat restricted and composed mostly of smallish spot orders. A fair amount of re-export business in natural products continues, due possibly to lack of stocks at Hamburg and trade restrictions. In pharmaceuticals business has been routine in character. One or two movements of importance are recorded. The first-hand suppliers of Santonin have withdrawn their prices. This development has been contemplated for some time. The article has been a doubtful purchase for holding in stock for some months, and it is likely that supplies in second-hands are more or less negligible. Nothing in the way of a fixed scale of prices has yet been notified, but the stoppage of sales clearly points to serious negotiations with that object in view. The home makers of Citrates notify an advance in the Iron Ammonium salt. So far there is no change in Potassium Citrate, but in view of the firm tone in Citric Acid and the fair possibility of an advance, the quotation for the potassium salt may have to be put up accordingly.

Crude Drugs

A moderate consuming business and some re-export trade is reported, with prices about maintained. There has been a further good demand for Agar on spot and in bond ; supplies are becoming very limited and current spot values are well under cost of replacement. Shipment offers for Curaçao Aloes have dried up at the source and spot supplies are negligible ; some Cape are offering spot and forward. Buchu leaves are fully steady on spot. A better demand for old peel Cascara Sagrada on spot is noted. Zanzibar Cloves are firmer and quoted at an advance. Norwegian Cod-Liver Oil is dull but fully steady for shipment. Sudan Gum Acacia values are well maintained. The recent sharp advances on spot and forward in Hydrastis are firmly held. Fair business in bales of Matto Grosso Ipecacuanha is reported on spot. Menthol cannot be described as a healthy market. Rhubarb has been quiet, but with small stocks of Shensi on spot and nothing offering forward, values are quite steady. A certain amount of spot business in Senega is noted. Spot quotations for Saffron are again slightly cheaper. In Waxes the chief feature is the further sharp advance in Carnauba, with supplies short.

Essential Oils

Most of these products have met with a slow demand during the past week. Anise (Star) is quoted cheaper for shipment. Cassia is firm on spot for reliable oil. Cinnamon Leaf is unsteady. Citronellas remain at low figures on quotation. Sicilian hand-pressed Lemon is held at the recent advance for shipment, with spot sellers at a substantial discount. Really first-class Mandarin is dearer for shipment. Business has been unimportant in Orange of any source. Japanese Peppermint has met with a fair home demand and prices are about level on the week. The demand for Spike and other Spanish oils has remained poor. Good brands of Spearmint are fully steady spot and forward at the recent advances. The scale of sales prices for Benzyl Acetate has been reduced. In the Fixed Oils group of products Linseed is slightly easier and dull. American Turpentine shows a further decline, but closes steadier. Palm Oils have quietened in demand, closing steady.

Exchange Rates on London

The following is a list of the chief Continental and other exchange rates at the opening on Thursday morning:—

Centre	Quoted	Par	July 4	Value of the £
Amsterdam ...	Fl. to £	12·107	7·23	11/11½
Berlin	Mks. to £	20·43	12·20	11/11½
Brussels	Belgas to £	nominal	29·20	16/7½
Copenhagen ...	Kr. to £	18·259	22·40	24/8
Lisbon	Esc. to £	110	109⅞	19/11¾
Madrid	Ptas. to £	25·22½	35 15/16	26/3¾
Milan	Lire to £	92·46	59½	12/10¼
Montreal	Dol. to £	4·86⅔	4·94½	20/3½
New York	Dol. to £	nominal	4·94	20/3½
Oslo	Kr. to £	18·159	19·90	21/11
Paris	Fr. to £	124·21	74⅜	11/11½
Prague	Kr. to £	164·25	117¾	12/0
Stockholm	Kr. to £	18·159	19·39½	21/4
Warsaw	Zloty to £	43·38	25 15/16	11/11¾
Zurich	Fr. to £	25·2115	15·05	11/11¾

Bank rate 2 per cent.

Pharmaceutical Chemicals, etc.

Business continues on modest lines, with quoted prices generally steady. Potassium permanganate is slightly cheaper and fully steady. Most Continental products are quoted on spot well below forward prices. Seasonal demand for citric and tartaric acids.

Amidol.—A little inquiry ; quoted unchanged: 56 lb., 7s. 3d.; 28 lb., 7s. 6d.; 14 lb., 7s. 11d. per lb., in 7-lb. tins. Wholesale distributors' prices for smaller quantities would be dearer.

Amidopyrin.—The demand is slow, with spot offers well below cost of replacement. To arrive, crystals, five cwt., 18s. 0¾d.; two cwt., 18s. 5¼d.; less than two cwt., 18s. 10½d. per lb.; with powder 2½d. per lb. extra.

Ammonium benzoate.—Spot values continue to be quoted at about 3s. 4d. to 3s. 6d. per lb., as to quantity. Market quiet.

Ammonium ichthiosulphonate.—Moderate business at keen prices: one cwt., 1s. 6½d., in 14-lb. tins ; 1s. 8d., in 1-lb. tins ; 1s. 10½d., in 8-oz. tins ; and 2s. 1d. per lb., in 4-oz. tins.

Aspirin.—Makers' scale of prices unchanged ; average business: home trade, ten cwt., 2s. 7d.; five cwt., 2s. 8d.; one cwt., 2s. 8½d. 28 lb., 2s. 9d.; 14 lb., 2s. 10d.; 7 lb., 3s.; 4 lb., 3s. 2d.; 1 lb., 3s. 4d. per lb. Bulk packing free, net, carriage paid. Contracts: Over twelve months, minimum, one ton ; over six months, less than one ton.

Barbitone.—Cheap spot offers ; business limited. To arrive, one cwt., 15s. 3¾d.; 56 lb., 15s. 8d.; small parcels, up to 16s. 0½d. per lb.

Benzoic acid (B.P.).—Fair demand ; market quite steady: quantities, ex works, 1s. 9½d.; spot parcels, 1s. 10d. to 2s. 2d. per lb., ex store, as to quantity.

Bismuth salts.—Makers' prices for these salts maintained. Carbonate, cwt. lots, 6s. 6d.; 8 lb., 7s. 3d.; smaller parcels, 8s. 6d. per lb., carriage paid. Metal values unchanged.

Bromides.—Market is steady ; business limited: ammonium, not less than five cwt., 1s. 9d.; one cwt., 1s. 10d.; 28 lb., 2s. 1d.; smaller quantities, 2s. 5d. per lb.; potassium B.P. crystals and granular, not less than five cwt., 1s. 6d.; one cwt., 1s. 7d.; 28 lb., 1s. 10d.; smaller quantities, 2s. 2d. per lb.; sodium B.P., not less than five cwt., 1s. 8d.; one cwt., 1s. 9d.; 28 lb., 2s.; smaller quantities, 2s. 4d. per lb.; without engagement. Special prices for larger quantities.

Butyl chloral hydrate.—Some few small orders at former rates: spot, 14 lb., 8s.; 7 lb., 8s. 3d.; 1 lb., 8s. 6d. per lb., in 1-lb. bottles.

Caffeine.—Continental material to come forward is quoted as follows: Pure, two cwt., 7s. 1d.; one cwt., 7s. 3¼d.; 56 lb., 7s. 5¼d.; less than 56 lb., 7s. 7¼d. per lb. Citrate, two cwt., 5s. 1¾d.; one cwt., 5s. 2¾d.; 56 lb., 5s. 3¾d.; less than 56 lb., 5s. 4¾d. per lb., 5-lb. tins free, carriage paid. Other salts quoted proportionately. British is unchanged: 56 lb., 7s. 9d.; less, 8s. per lb. Citrate, 56 lb., 5s.; less, 5s. 3d. per lb.

Calcium lactate.—Moderate inquiry ; market competitive: spot, one cwt., 1s. 0¾d.; 56 lb., 1s. 1½d.; 28 lb., 1s. 2½d.; smaller quantities, up to 1s. 6d. per lb.

Carbolic acid (B.P. crystals).—The scale of prices for deliveries during the twelve months July 1, 1935, to June 30, 1936, is as follows: Twenty tons, 7d.; ten tons, 7⅛d.; one ton, 7¼d.; less than one ton, 7½d. per lb., in drums, carriage paid. Wholesale distributors' prices for small parcels would be dearer.

Chloral hydrate.—The home maker is quoting as follows: duty-paid crystals, in 14-lb. free containers, five cwt., 3s. 1d.; one cwt., 3s. 2d.; 28 lb., 3s. 3d.; 14 lb., 3s. 4½d. per lb.; 28-lb. jars one penny per lb. extra.

Citrates.—Makers advise their prices for Ferri Ammonium Citrate were advanced 1d. per lb. on July 2. The scale is now as follows: less than 4 lb., 2s. 8d.; 4 lb. and less than 7 lb., 2s. 6d.; 7 lb. and less than 14 lb., 2s. 4d.; 14 lb. and less than 28 lb., 2s. 3d.; not less than 28 lb., 2s. 1d. per lb., 28-lb. tins free. Prices for other citrates remain unchanged at the moment.

Citric acid (B.P. crystals).—The market is firm and tends to advance ; business good. British makers quoting at 11¾d. per lb., less 5 per cent. discount, nominal and without engagement. Dealers' prices for imported material are competitive.

Cocaine.—British makers' prices for this market for wholesale bulk quantities are as follows: Hydrochloride and Nitrate, 25 oz. and over, 29s. 9d.; 16 oz. and less than 25 oz., 30s. 9d.; over 8 oz. and less than 16 oz., 31s. 9d. per oz. Pure, Citrate and Salicylate, 25 oz. and over, 32s. 6d.; 16 oz. and less than 25 oz., 33s. 6d.; over 8 oz. and less than 16 oz., 34s. 6d. per oz., 16-oz. packages free, smaller packing extra. The scales of prices applicable to distributors of smaller quantities are as follows: Hydrochloride and Nitrate, 8 oz., 34s. 1d.; 4 oz. and less than 8 oz., 34s. 7d.; 2 oz. and less than 4 oz., 35s. 5d.; 1 oz. and less than 2 oz., 36s. 5d.; ½ oz. and less than 1 oz., 37s. 11d.; ¼ oz. and less than ½ oz., 40s. 11d. per oz. Pure, Citrate and Salicylate, 8 oz., 36s. 10d.; 4 oz. and less than 8 oz., 37s. 4d.; 2 oz. and less than 4 oz., 38s. 2d.; 1 oz. and less than 2 oz., 39s. 2d.; ½ oz. and less than 1 oz., 40s. 8d.; ¼ oz. and less than ½ oz., 43s. 8d. per oz., packages extra. Resale: Sales subject to buyers undertaking not to re-sell any quantity at below the scale price for such quantity current at the time of re-sale. These scales of prices do not apply to export business, particulars of which may be obtained from the usual sources of supply. It is understood there has been no change in export prices.

Cream of tartar.—British material, 99 to 100 per cent., is quoted at 79s. per cwt., less 2½ per cent. discount, nominal and without engagement. Dealers' prices for imported are competitive.

Creosote (B.P.).—Business has been unimportant. Bulk quantities, in 25-kilo. demijohns, 1s. 10d.; smaller packings, 1s. 10½d. to 2s. 2d. per lb.

Guaiacol (crystals).—Prices for Continental material to come forward: 28-lb. jars, 10s. 0¼d.; 14-lb. jars, 10s. 2¼d.; 1-lb. bottles, 10s. 8¼d. per lb., ex store. Liquid: 28-lb. demijohns, 9s. 6¼d.; 14-lb. demijohns, 9s. 9¼d.; 1-lb. bottles, 10s. 0¼d. per lb., ex warehouse.

Guaiacol carbonate.—Continental prices are unchanged: one cwt., 11s.; smaller parcels, 11s. 3¾d. per lb.; spot offers at well under these figures.

Hexamine.—British material in fair demand, particularly powder. B.P. powder, from 1s. 3¼d. to 1s. 4½d.; free-running crystals, from 1s. 7d. to 1s. 8½d. per lb., carriage paid, for bulk lots. Dealers quoting free-running crystals, two cwt., 1s. 8d.; one cwt., 1s. 9d.; 14 lb., 1s. 10d.; smaller parcels, up to 2s. per lb., carriage paid.

Hydroquinone.—Demand fair in limited quantities: one cwt., 4s. 6¾d.; 56 lb., 4s. 8¾d.; 28 lb., 4s. 10¼d.; 14 lb., 5s. 1¼d. per lb., carriage paid.

Iodides.—Makers' scales of prices for these salts continue steady. Potassium Iodide, B.P., one cwt., 5s.; 28 lb., 5s. 2d.; 14 lb., 5s. 4d.; 7 lb., 5s. 8d.; 4 lb., 6s. 2d.; smaller quantities, 6s. 8d. per lb.

Lactic acid (B.P.).—Limited inquiry; market about steady: quantities, in carboys, 1s. 4½d. to 1s. 5d.; in winchesters and bottles, 1s. 6d. to 1s. 9d. per lb., as to quantity.

Mercurials.—Makers' prices for these salts unchanged. Chloride, B.P., one cwt., 4s. 9d.; less than one cwt., 4s. 10d. per lb. Metal values steady.

Methyl salicylate (B.P.).—A little more inquiry. Spot, ten cwt., 1s. 5d.; five cwt., 1s. 5½d.; one cwt., 1s. 6d.; less than one cwt., 1s. 7d.; small quantities, in bottles, up to 2s. per lb.

Methyl sulphonal.—Forward prices from Continent unchanged as given. Some cheap spot offers: one cwt., 19s. 9¼d.; 56 lb., 20s. 2¾d.; small parcels, 20s. 8¾d. per lb.

Paraldehyde.—Makers' scale of prices is as follows: 1 w-quart, 1s. 9d.; 6 w-quarts, 1s. 7½d.; 12 w-quarts, 1s. 5¼d.; 36 w-quarts, 1s. 4½d. per lb., carriage paid on minimum 6 w-quarts. One demijohn, 1s. 2d. per lb., carriage paid.

Phenacetin.—Low prices continue; business of small importance. Crystals or powder, bulk quantities, 2s. 7d. to 2s. 9d.; smaller parcels, 2s. 9½d. to 3s. per lb., as to quantity.

Phenazone.—The scale for home trade is as follows: crystals, five cwt., 8s. 9¾d.; two cwt., 9s. 0½d.; less, 9s. 3d. per lb.; powder, 2½d. per lb. extra. Export prices to the Empire, quoted f.o.b. Continent: five cwt., 8s. 9d.; two cwt., 8s. 11d.; less than two cwt., 9s. 1d. per lb. Some spot offers at cut prices.

Phenolphthalein.—Business on the slow side: two cwt., 2s. 9d.; one cwt., 2s. 10d.; 28 lb., 3s.; 14 lb., 3s. 1d.; 7 lb., 3s. 2d.; smaller parcels, up to 3s. 6d. per lb.

Phenyl ethyl barbituric.—Dealers are quoting small quantities at about 26s. 6d. to 27s. per lb., in 2-lb. bottles.

Potassium permanganate (B.P.).—Dealers' prices slightly cheaper and steady; fair business: spot, five cwt., 9¾d.; one cwt., 10d. per lb., in drums; smaller packings, 10½d. to 1s. per lb.

Potassium sulphoguaiacolate.—Market is irregular and dull on spot. To come forward: two cwt., 6s. 2d.; less, 6s. 4½d. per lb., ex wharf.

Pyrogallic acid.—Makers' prices continue at the reduction recently notified. Crystals, one cwt., 6s. 3d.; 56 lb., 6s. 6d.; 28 lb., 6s. 9d. per lb., net; 14 lb., 7s. 6d.; 7 lb., 8s. 3d.; less than 7 lb., 8s. 9d. per lb., less 2½ per cent., 7-lb. tins free, carriage paid. Wholesale distributors' prices for smaller quantities would be dearer.

Quinine salts.—Convention prices are steady. Sulphate, 2s. 1d.; bisulphate, 2s. 1d.; ethyl carbonate, 2s. 8¾d.; salicylate, 2s. 9½d.; phosphate, 3s. 2½d.; hydrochloride, 2s. 7½d.; bihydrochloride, 2s. 10¾d.; hydrobromide, 2s. 7½d.; bihydrobromide, 2s. 10¾d.; valerianate, 3s. 7d.; hypophosphite, 3s. 10¾d.; alkaloid, 2s. 11d. per oz., carriage paid on bulk quantities; 100-oz. tins free, smaller packing extra.

Resorcin.—Market remains quiet: crystals, one cwt., 4s. 11d.; 56 lb., 5s.; 28 lb., 5s. 1d.; 14 lb., 5s. 3d.; 7 lb., 5s. 6d.; less than 7 lb., 6s. per lb.

Saccharin.—The Convention price for 550 is 37s. 6d. per lb., duty paid, with rebates for quantities.

Salicylic acid (B.P.).—Moderate inquiry; makers' prices unchanged: five cwt., 1s. 7d.; one cwt., 1s. 7½d.; 28 lb., 1s. 8d.; 14 lb., 1s. 9d.; 7 lb., 1s. 11d.; 4 lb., 2s. per lb.

Salol.—Business has been light; fairly steady on quotation: spot, crystals, two cwt., 3s. 6d.; one cwt., 3s. 6½d.; 56 lb., 3s. 7¼d.; smaller parcels, up to 4s. per lb.; powder, 2d. per lb. extra.

Santonin.—On Wednesday morning first-hand suppliers withdrew their prices. At the moment the spot value is nominal. This development obviously points to an effort being made to fix up a Convention, but so far no news as to the probable trend of values is available.

Sodium benzoate (B.P.).—Modest business on a keen market. Bulk quantities, about 1s. 6d.; cwt. lots, 1s. 7d.; smaller parcels, 1s. 8d. to 1s. 10d. per lb.

Sodium diethylbarbiturate.—Scale of prices unchanged; business slow: spot, one cwt., 15s. 9d.; 28 lb., 16s.; 14 lb., 16s. 3d.; 7 lb., 16s. 6d.; smaller parcels, up to 17s. per lb.

Sodium salicylate (B.P.).—Fair demand; quoted unchanged: home trade, crystals or powder, five cwt., 1s. 8½d.; one cwt., 1s. 9d.; 28 lb., 2s.; 14 lb., 2s. 2d.; 7 lb., 2s. 3d.; 1 lb., 2s. 6d. per lb.

Strychnine salts.—Makers' prices are steady:—

	Under 16 ozs.	16 ozs.	35 ozs.
	Per oz. s. d.	Per oz. s. d.	Per oz. s. d.
Alkaloid cryst.	2 8½	2 7	2 6½
Alkaloid powder	2 7½	2 6	2 5½
Bisulphate	2 2½	2 1	2 0½
Hydrochloride	2 5½	2 4	2 3½
Nitrate	2 3½	2 2	2 1½
Sulphate cryst.	2 4½	2 3	2 2½

25-oz. containers, free; 1-oz. bottles, 2½d.; 2-oz. bottles, 3½d. Other conditions as usual. Lower prices for bulk quantities. Wholesale distributors' prices for smaller quantities would be dearer.

Sulphonal.—Cheap spot sellers. To come forward from the Continent, as follows: crystals or powder, one cwt., 15s. 10¾d.; 56 lb., 16s. 6d.; smaller parcels, up to 17s. 7½d. per lb.

Tartaric acid (B.P. crystals).—Seasonal demand, with imported material competing keenly. British makers quoting at 1s. 0½d. per lb., less 5 per cent. discount, nominal and without engagement.

Theobromine.—Continental material is quoted as follows: pure, two cwt., 7s. 0½d.; one cwt., 7s. 2¼d.; 56 lb., 7s. 4¾d.; less than 56 lb., 7s. 6¾d. per lb. Soda salicylate, two cwt., 6s. 1¼d.; one cwt., 6s. 2¼d.; 56 lb., 6s. 3¼d.; less than 56 lb., 6s. 4½d. per lb., 5-lb. tins free, carriage paid. Other salts quoted proportionately.

Thymol.—Quiet; quoted unchanged: synthetic, fine white, one cwt., 5s. 9d.; 56 lb., 5s. 11¼d.; 28 lb., 6s. 3½d.; 14 lb., 7s. per lb.; ex ajowan seed, one cwt., 8s. 3d.; 56 lb., 8s. 6d.; 28 lb., 9s.; 14 lb., 10s. per lb.

Vanillin.—Fair inquiry; Convention prices steady: ex clove oil or guaiacol, five cwt., 13s. 3d.; one cwt., 13s. 6d.; 56 lb., 13s. 9d.; less, 14s. per lb.

Crude Drugs, etc.

Aconite root.—Some Napellus is available on spot at about 65s. per cwt. for small parcels.

Agar.—Spot values are fully maintained, with a continued home trade and export demand. Supplies are now very limited and replacement, on current shipment figures, will cost about 3d. per lb. more. Goods afloat for this market are reported to be negligible. Spot, Kobe No. 1, 2s. 6d.; No. 2, 2s. 4d.; Yokohama No. 1, 2s. 4d. per lb.; shipment, Kobe No. 1, 2s. 4d.; No. 2, 2s. 3d.; Yokohama No. 1, 2s. 2½d. per lb., c.i.f.

Alkanet root.—Dealers are offering spot supplies in the region of 45s. per cwt.

Aloes.—Any Curaçao that may be offering on spot would be from 92s. 6d. to 100s. per cwt. Offers from the source have dried up and orders have brought back the reply that there is nothing left. Cape on spot is offered sparingly at 50s. in cwt. boxes; shipment is quoted steadily at 48s. 6d. per cwt., c.i.f.

Arnica flowers.—A modest spot business, with the price for small parcels about 10d. per lb.

Antimony.—Chinese crude for shipment is quoted at £25 5s., c.i.f. English regulus at £76 to £77, spot.

Balsams.—At this season of the year the market is flat. Spot, *Tolu*, 1s. 4d. to 1s. 4½d.; *Canada*, 2s. 10½d. to 2s. 11d. per lb., as to quantity.

Barbasco root.—Shipment offers, basis 5 per cent. rotenone, are at 10½d. per lb., c.i.f.

Belladonna.—Dealers are offering root at 55s. and leaves at 65s. per cwt. for small quantities.

Buchu.—This market keeps fully steady, with average business moving. Ovals are scarce from 1s. and rounds from 1s. 2d. to 1s. 3d. per lb., as to quality. Exports from the Cape during the period January-March, 1935, totalled 78,924 lb., valued at Waarde 2,717, compared with 52,553 lb. (Waarde 1,367) during the same three months of 1934.

Burdock root.—Some spot supplies are available at about 45s. per cwt. for small parcels.

Camphor.—Spot, slabs, 2s. 1d.; flowers, 2s. 1¼d.; tablets, 2s. 4½d.; shipment, slabs, 1s. 9¾d.; flowers, 1s. 10d.; tablets, 2s. 1d. per lb., c.i.f. English refined is still unchanged: flowers, one cwt., 3s. 1d.; 28 lb., 3s. 2d.; small lots, 3s. 3d. per lb. Transparent tablets, 4 oz., 8 oz. and 16 oz., 3s. 4d.; 1 oz. and 2 oz., 3s. 5d.; ½ oz. and ⅓ oz. and ¼ oz., 3s. 6d. per lb.; special prices for contracts for quantities.

Cantharides.—The demand on spot is unimportant. Chinese, about 3s.; Russian, 6s. 4½d. per lb. for small lots.

Cascara sagrada.—There has been no rush of orders for shipment of new crop, which is quoted in the region of 29s. per cwt., c.i.f., in car-load lots. There has been a very nice business on spot, with 1933 peel at 40s. and 1932 peel at 45s. per cwt.

Chamomiles.—The call for remaining old crop has been slow, with holders quoting 165s. to 175s. per cwt., as to quality and quantity.

Cloves.—Market is firm at the advance. Zanzibar, spot, 7d.; shipment, July-August, 6½d. per lb., c.i.f. Madagascar, 5⅞d., in bond; shipment, July-August, 5¾d. per lb., c.i.f.

The landings of Zanzibar in London during the week ended June 29 were *nil*, and the deliveries 72, leaving a stock of 2,477. From January 1 to date the landings of Zanzibar have been 1,438 and the deliveries 2,055. Landings of Madagascar for the week ended June 29 were 100,'and the deliveries *nil*, leaving a stock of 2,072. From January 1 to date landings of Madagascar have been 2,846 and the deliveries 1,021 packages.

Coconut (desiccated).—Values are about maintained; market quiet. Spot, fine, 24s. 6d.; medium, 24s. 6d.; shipment, halves, July-August, 21s. per cwt., c.i.f.

Cod-liver oil.—Bergen reports Finmarken fishing has concluded. The shipment market is quiet but fully steady. Finest Lofoten steam-refined non-freezing medicinal oil, 90s. to 92s. per barrel, c.i.f. London. Spot, in small lots, 135s. per barrel, ex store, duty paid. Newfoundland, non-freezing medicinal oil, 130s. per barrel, ex store. British non-freezing medicinal oil is now quoted at 110s. to 112s. 6d. per barrel, c.i.f. London, duty free, while quotations from another home source are at higher figures.

Colchicum.—Some root on spot is offered at about 45s. per cwt. for small parcels, with a limited sale.

Damiana leaves.—Dealers are quoting spot leaves at 11d. to 11½d. per lb., as to quantity. Market quiet.

Derris root.—Spot values range from 1s. 1d. to 1s. 3d., as to ether extract, London test. A parcel testing 4.9 rotenone is reported at about 1s. 1½d. per lb. Shipment prices held steady at 1s. 1½d. to 1s. 3d. per lb., c.i.f. Market has been quieter.

Ergot.—The spot market has been quieter. Spanish, 1s. 4d. to 1s. 5d., as to quantity. Russian, 1s. 2d. per lb.

Gamboge.—Some good Siam pipe has changed hands at about £14 10s. per cwt., ex store.

Gentian.—A modest business on spot, with French at 36s. to 37s. 6d. and Italian at 33s. to 34s. per cwt.

Ginger.—Business has been restricted but values are well maintained. West African, spot, 35s. 6d.; for arrival, 33s. 6d. per cwt., c.i.f.

Gum acacia.—Values are keeping quite steady, with a little more inquiry reported this week: spot, Kordofan cleaned sorts, 45s. 6d.; bleached, 87s. 6d. to 90s.; shipment, Kordofan cleaned sorts, 42s. 6d. per cwt., c.i.f.

Henbane.—Some small parcels on spot are quoted at about 82s. 6d. per cwt., with little interest shown.

Honey.—Market remains sluggish, with stocks of most descriptions ample. Jamaican, dark liquid manufacturing to pale, 23s. to 28s. 6d. Californian, pale to white set, 45s. 6d. to 48s. per cwt.

Hydrastis.—The shipment price from the source continues firm at 7s. per lb., c.i.f. Spot holders are asking 7s. 6d. and bids of a lower figure refused in some quarters.

Ipecacuanha.—Some spot business is recorded, with Matto Grosso fetching about 4s. 10½d. to 5s. per lb., as to quantity.

Jalap.—Spot holders are offering some spot, testing 15 per cent., at about 1s. 1d. per lb. for fair quantities.

Liquorice root.—Natural root freely offered in the region of £12 per ton; business slow. Decorticated steady on spot at about 47s. 6d. per cwt. for small parcels.

Menthol.—Conditions in this market cannot be described as healthy and business is quiet, being confined to a modest consuming demand and an occasional export order. K/S brands, spot, 11s. 6d.; in bond, 10s. 1½d.; shipment, July-August, 9s. 6d.; October-December, 9s. 3d. per lb., c.i.f. sellers. Japanese shippers quote prompt at 10s. and October-December at 9s. 4½d. per lb., c.i.f.

Mercury.—The Spanish-Italian group report their shipment quotation is steady at 56 dollars, f.o.b. Continent. Spot, in small lots, £11 10s. per bottle, ex store.

Opium.—Occasional small spot business, with holders asking 1s. 5d. to 1s. 5½d. per unit, ex store, as to quantity.

Pepper.—Market is dull and easier. Lampong, $2\frac{15}{16}$d., in bond; shipment, August-October, 2¾d., c.i.f. Tellicherry, spot, 4¾d.; shipment, August-October, 44s., c.i.f. Aleppy, spot, 4½d.; shipment, August-October, 43s., c.i.f. White Muntok, spot, 10d.; shipment, all positions, 9d. per lb., c.i.f. nominal.

Pimento.—Market fully steady, with more inquiry. Spot, 3d. per lb.; shipment, July-August, 28s. per cwt., c.i.f.

Psyllium seed.—Some re-cleaned French seed on spot is quoted at about 8d. per lb.

Rhubarb.—The demand has been quiet. On spot small stocks of Shensi quoted from 3s. 9d. to 4s. 3d. Rough round in occasional demand, with two-thirds pinky at 1s. 3d. and all pinky at 1s. 4½d. per lb., ex store. Ordinary quality for shipment quoted at 1s. 1d., c.i.f. No Canton or Shensi offering for shipment.

Rubber.—The market has moved within narrow limits; business has been patchy and rather limited. Standard ribbed sheet, spot, 5⅞d.; August, $5\frac{15}{16}$d.; September, 6d.; October-December, $6\frac{1}{16}$d.; January-March, 6¼d.; April-June, $6\frac{7}{16}$d. per lb.

Saffron.—Dealers' prices have been reduced, market now steady; small business. Spot, B.P., 1898, prime, 38s. 6d.; extra, 36s. 6d.; super, 35s. 6d. per lb., and slightly less for bulk quantities.

Sarsaparilla.—Market is dull, with values unchanged: spot, Jamaican, grey, 1s. 4d. to 1s. 4½d.; native, mixed colours, 11d. to 1s. per lb., as to quantity.

Seeds.—Anise.—Spot, duty-paid Spanish, 68s.; Bulgarian, 32s. Caraway.—Dutch, unchanged, 34s. 6d., duty paid; 28s. 6d., f.o.b. Holland. Coriander.—Morocco, spot, 13s., duty paid. New crop, for shipment, dearer; 10s. 9d., c.i.f., now asked. Cumin.—Market quiet on spot: Morocco, 50s. to 52s. 6d., duty paid. New crop, for shipment, quoted at 40s., c.i.f. Fenugreek.—Market unchanged. Morocco, spot, 15s., duty paid, and for shipment 10s. 6d., c.i.f. Mustard.—English, 24s. to 35s. per cwt., according to quality.

Senega.—The shipment price has fallen back a little, with offers now at 1s. 2d. per lb., c.i.f., for new crop, July-August shipment. Spot holders are quoting in the region of 1s. 3d. to 1s. 3½d. per lb., and a very fair business is reported.

Senna.—There have been some export orders in the market for Alexandrian broken leaves and also siftings, and the London market is now practically bare of supplies. It is difficult to secure offers for shipment from the Sudan and it would appear that increased prices may be seen during the next few months, particularly for siftings, as the recent collection of crude senna has been on a smaller scale than formerly. The position of Alexandrian hand-picked pods and also Tinnevelly leaves remains unchanged from our last report.

Shellac.—Quoted prices show a further improvement, but business is quieter. Spot, standard TN orange, 50s. to 55s.; fine orange, 90s. to 150s.; pure button, 90s. to 100s. per cwt. For delivery, TN, August, 50s. For arrival, TN, July-August, 57s. 6d. per cwt., c.i.f.

Squill.—Spot holders are quoting 25s. to 27s. 6d. per cwt., as to quality and quantity.

Stramonium.—Market quoted rather dearer. Best green Hungarian, 47s. 6d. and No. 2 at 42s. 6d. per cwt. for small parcels.

Tragacanth.—There has been a fair demand this week, principally for second-grade whites, ranging from £18 to £22 per cwt. Textile grades in modest inquiry and quoted at former figures of 115s. to 125s. per cwt.

Valerian root.—Any root available on spot is quoted in the region of 90s. per cwt.

Wax.—Bees': Market is fully steady, with supplies offering limited. Abyssinian, spot, 112s. 6d.; shipment, 98s., c.i.f. Benguella, spot, 112s. 6d.; in bond, 102s. 6d.; shipment, 105s., c.i.f. Conakry, spot, 112s. 6d.; shipment, 96s., c.i.f. Dar-es-Salaam, spot, 112s. 6d., nominal; nothing offering; shipment, 102s., c.i.f. Carnauba.—Shipment prices are again dearer, with supplies very scarce. Fatty grey, 167s. 6d.; shipment, July-August, 162s., c.i.f. Chalky grey, 150s.; shipment, July-August, 145s., c.i.f. Primeira, 220s.; shipment, July-August, 192s. 6d., c.i.f. Mediana, 210s.; shipment, July-August, 180s. per cwt., c.i.f.

Essential Oils, etc.

The volume of business being transacted is none too good, and in some products the tone is unsteady. Anise (Star) is easier forward. Cassia scarce and dear on spot. Citronellas remain at low values forward. Sicilian hand-pressed lemon is about steady but rather quiet. Japanese peppermint is steady, with a modest spot business.

Almond.—Market steady; average small business. English-made, cwt. lots, 2s. 6d.; smaller parcels, up to 2s. 8d.; foreign, cwt. lots, 2s. 4d.; smaller parcels, up to 2s. 7d. per lb. Bitter, French, 9s. per lb.

Anise (Star).—Spot market has been quiet; forward prices are easier. Spot, "Red Ship," in leads, 2s. 4d.; in tins, 2s. 3d.; in drums, 2s. 2½d. Shipment, in leads, 2s. 1½d.; in tins, 2s. 1d.; in drums, 2s. 0½d. per lb., c.i.f.

Bay.—Occasional business in small lots, with 49 to 50 per cent. quoted at 5s. 2d. to 5s. 4½d. per lb., as to quantity.

Benzyl acetate.—Due to keen competition prices have been reduced, as follows: ten cwt., 1s. 3½d.; 5 cwt., 1s. 3¾d.; one cwt., 1s. 4d.; 56 lb., 1s. 4½d.; 28 lb., 1s. 5d.; smaller parcels, up to 1s. 8d. per lb., delivered.

Bergamot.—There seems to have been a little more inquiry for shipment but actual business is so far unimportant. Offers continue steady in the region of 4s. 8d. up to 5s. per lb., c.i.f., as to brand, with spot sellers from 4s. 10½d. to 5s. 2d. per lb., as to quantity and quality.

Bois de rose.—The call for Brazilian on spot is small, with prices holding at 5s. 7½d. to 5s. 9d. per lb., as to quantity ; shipment, 5s. 7d., c.i.f. Cayenne, 10s. 3d., c.i.f.

Cajuput.—The quoted prices are being shaded in some quarters for quantities. B.P., 2s. 1d. to 2s. 3d.; green, 1s. 9d. to 1s. 11d. per lb., as to quantity.

Cananga.—The value of good quality oil on spot is steadily maintained at about 12s. 7½d. per lb.; shipment offers restricted and at 11s. 4½d., c.i.f.

Caraway.—Business limited and some keen prices noted for other than Dutch origin. Dutch, rectified, 10s. 2d. to 10s. 6d., landed ; crude, 6d. per lb. less.

Cassia.—The supply of good quality oil on spot now is very short and holders are wanting up to 5s. 6d. for leads ; drums are available at about 5s. per lb. This week orders sent to China for immediate shipment at 4s. 6d., c.i.f., are reported to have been accepted.

Cedarwood.—Some occasional interest in this article, with the African and American oils competitive at about 1s. 1¾d., in drums, and up to 1s. 4½d. per lb. for smaller packings, spot.

Cinnamon leaf.—This market is rather unsteady, due to cheap shipment quotations. Ceylon oil on spot is at about 2s. 7d., with the shipment price for drums about 2s. 3½d. per lb., c.i.f.

Citronella.—Extremely low prices continue to be quoted here, yet, when an inquiry of any size comes on the market, there is a firmer tendency. Ceylon, spot, about 1s. 1½d., in drums, and up to 1s. 4d. for smaller packings ; shipment, barely 11d., c.i.f., in drums. Java is dull ; shipment, about 1s. 1½d.; spot, in drums, about 1s. 3½d.; smaller packings, up to 1s. 6d. per lb.

Clove.—Fair business on spot continues at keen prices. Madagascar, shipment, about 2s. 4½d., c.i.f., in drums ; spot, in drums, about 3s. and up to 3s. 2d. for small packings.

Eucalyptus.—Fair inquiry is being received, with prices for Empire oil quite steady. Australian, 70 to 75 per cent., 11¾d. to 1s.; 80 to 85 per cent., 1s. 0½d. to 1s. 1d. per lb., landed, in fair quantities. Spanish, 70 to 75 per cent., 1s. 2d. per lb.

Geranium.—Bourbon continues to be quoted for shipment up to 21s. 3d., c.i.f., for good quality oil. The spot value is indicated at about 21s. to 22s. 6d., as to quality. Algerian, 22s. 3d. per lb., c.i.f.

Gingergrass.—Spot price is nominal, with practically nothing offering. Shipment offers received at about 4s. 3d. per lb., c.i.f.

Ho (Shiu).—A limited amount of spot business at former values, ranging from 1s. 9¾d. to 2s. 1d. per lb., as to quality and quantity.

Juniper berry.—Market about steady ; business slow. Good quality oil, 3s. to 3s. 3d. and the finest up to 4s. 9d. per lb.

Lavender.—Market has been neglected: genuine Mt. Blanc, 38 to 40 per cent., is offered at 26s. to 28s., landed ; a good quality at about 21s. 6d. to 23s.; and other offers are down to 17s. 3d. per lb., landed. Lavandin is steady at about 12s. 6d. per lb.

Lemon.—During the past week there has been a restricted demand for Sicilian hand-pressed, mostly for spot goods. Shipment offers continue irregular, but generally on a higher level than formerly, ranging from 4s. 7½d. up to 5s. per lb., c.i.f., as to brand and quantity. There are spot holders, willing to take a profit, at about 4s. 4½d. to 4s. 9d., as to brand and quantity.

Lemongrass.—The only feature of this market is the very limited supplies offering on spot, for which up to 3s. 3d. is being asked. The shipment market remains dull at former rates.

Lime.—Fair demand for small spot parcels, for which about 24s. is asked. The shipment price for West Indian distilled is steady at 22s. 6d., c.i.f., for quantities.

Mandarin.—The shipment market for really first-class oil is firm at 14s., c.i.f. On spot the best oils are being quoted at 15s. to 16s. per lb., with supplies limited.

Neroli.—New crop quotations are being maintained ; little interest being shown at present: 13s. 6d., 14s. 9d., 17s. and 19s. 6d. per oz., according to quality, landed and duty paid.

Nutmeg.—Quotations are on rather easier terms, with American and English from 5s. to 5s. 4½d. per lb., as to quantity, spot.

Orange.—The demand for this oil is slow for the time of year. French Guinea continues to be freely offered forward at about 2s. 8d., c.i.f., with the spot value of drums 3s. and smaller packing up to 3s. 4d. per lb. Sicilian, sweet, is at any figure from 10s. per lb. upwards, as to source, on spot. Californian, spot, one case, 2s. 6½d.; two or more cases, 2s. 4d.; drums, 2s. 3d. per lb., with a small demand reported.

Palmarosa.—Market steady but dull. Spot, 6s. 6d. to 6s. 7½d.; shipment, about 6s. 3d. per lb., c.i.f.

Patchouli.—The price asked for the small supplies of Singapore oil available on spot is maintained at about 10s. 6d., with very little doing.

Peppermint.—Fair business on spot from consumers. Spot, 3s. 9d. to 3s. 10½d., as to brand ; afloat, 3s. 8d.; shipment, July-August, 3s. 8d. to 3s. 9d., as to brand ; October-December, 3s. 4½d. to 3s. 5d., c.i.f. sellers. Japanese shippers quote July-August 3s. 9d. and October-December 3s. 4½d. per lb., c.i.f. The American natural oil, in drums, has received but little inquiry, with shipment prices ranging from 2 dollars 60 cents to 2.85 per lb., c.i.f.

Petitgrain.—Occasional business on spot, with holders quoting about 4s. 2d. to 4s. 3d.; shipment, about 3s. 6d. per lb., c.i.f.

Rosemary.—This market seems to be neglected. Spanish, first quality, 2s. 1d. to 2s. 1½d.; second quality, 1s. 8d. to 1s. 10d. per lb., as to quantity.

Sandalwood.—Genuine East Indian Mysore, 19s. per lb., in one-case lots, on spot ; isolated cheaper offers noted. English-made East Indian, 22s. 6d. to 25s. per lb., as to quantity. English-made West Indian, cwt. lots, 6s. 9d.; 56 lb., 6s. 10½d.; 14 lb., 7s. per lb. Australian, case lots, 15s. 6d. per lb.

Sassafras.—Spot holders continue to quote in the region of 4s. per lb. for small lots of good quality natural oil. Artificial at cheaper figures.

Spearmint.—The first-hand sources of supply of the best brands are quoting 8s. 9d. to 9s., spot, with shipment steady at 7s. 9d. to 8s. per lb., c.i.f., for a quantity. Some oil on spot is maintained at lower figures.

Spike.—Market steady, but business lacking. Spanish, about 5s. 6d. per lb., spot, for good quality oil.

Wintergreen.—Dealers are quoting small lots in 7-lb. bottles from 6s. per lb., spot.

The following are current prices for synthetics, etc.:—Acetophenone, 6s. to 6s. 4d. per lb.; amyl acetate, pure, 122s. 6d. per cwt.; technical, 107s. 6d.; amyl salicylate, 2s. 2d. per lb. for cwt. lots up to 2s. 6d.; aubepine, ex para creosole, 8s. 3d. to 8s. 9d. per lb.; benzaldehyde, f.f.c., 2s. 2d. to 2s. 4d. per lb.; benzyl acetate, 1s. 3½d. to 1s. 8d. per lb.; benzyl alcohol, cwt. lots, 1s. 11d. up to 2s. 3d. per lb. for small lots ; bromstyrol, 100 per cent., 9s. 6d. to 11s. per lb.; butyric acid, 3s. 3d. to 3s. 6d. per lb.; citral, chemically pure, 8s. to 8s. 6d. per lb.; coumarin, 7s. 3d. to 8s. per lb.; ethyl phthalate is steady at 1s. 4d. to 1s. 9d. per lb.; eugenol, 7s. 6d. to 8s. per lb.; geraniol, ex palmarosa, 15s. to 17s. per lb.; heliotropine, 100 per cent. crystals, 7s. per lb., as to quantity ; iso eugenol, 9s. 6d. to 10s. per lb. Methyl anthranilate, 6s. 6d. to 6s. 9d. per lb. Mirbane is quoted at 7d. to 8d. per lb.; musk, ketone, 19s.; ambrette, 18s.; xylol, 4s. 6d. per lb.; phenyl ethyl alcohol, 8s. to 8s. 6d. per lb.; terpineol, 1s. 4d. for ton lots up to 1s. 9d. per lb. for small parcels.

Fixed Oils, etc.

Business generally in these products has been on the quiet side. Palm oils are about steady. Linseed oil is slightly cheaper and dull. American turpentine continues to weaken, but closes rather steadier. Acid oils.—Market steady, but rather quiet: coconut and/or palm kernel, nominal, nothing offering ; groundnut, 19s.; soya, 17s. 3d., spot. Castor.—Moderate business, with prices keeping steady: pharmaceutical, 38s.; first pressings, 35s.; second pressings, 33s. (barrels) ; cases, £4 per ton extra, ex mills, Hull, in not less than one-ton lots ; Bombay, 29s. (drums), c.i.f. Coconut.—Market has been quieter and is quoted slightly easier: deodorised, 28s. (barrels), spot ; Ceylon, 19s. 6d. (drums), c.i.f. Cotton.—Business on limited scale ; quoted unchanged: deodorised, 31s.; common edible, 29s. 6d.; soapmaking, 29s.; crude, 26s. (barrels), spot. Groundnut.—Market is about steady ; business quieter: deodorised, 38s. (barrels), spot ; crude Oriental, 30s. (drums), c.i.f. Linseed (raw, naked).—Market has been dull and is quoted slightly cheaper. Spot, 22s. 9d. for small quantities ; July, 20s. 3d.; August, 20s. 3d.; September-December, 20s. 3d.; January-April, 20s. 6d. Boiled oil, spot, 24s. Olive.—Market steady, with average business passing: edible, in tins in cases, 70s. per case of ten gallons ; B.P., 5s. 3d. per gallon, in 40-gallon barrels. Palm.—At the slightly lower values now quoted the market is steady but rather quiet: Lagos, 17s. 4½d., shipment ; softs, 17s. 1½d., shipment ; mediums, 17s., shipment ; hards, 19s., shipment ; bleached, 21s., spot. Palm kernel.—Quoted cheaper on a slow market: deodorised, 29s. 9d.; crude, 22s. 6d., spot. Rape.—Market continues steady ; business restricted. Refined, 37s.; crude, 35s. 6d., spot (barrels). Resin.—Market is slightly easier and remains dull: B, 10s. 1½d.; D, 11s.; F/G, 12s. 1½d.; N, 13s. 1½d.; W/G, 13s. 4½d.; W/W, 14s. 9d. per cwt., ex wharf. Soya.—Quoted at lower values ; market quiet: deodorised, 28s. 9d.; crude, 25s., spot (barrels). Turpentine, American.—Values continue to decline ; market is dull but steadier at the close. Total London stocks, 9,059 barrels. On spot, 42s. Wood.—The demand has been slower and the market is not quite so strong. Hankow, in barrels, July, 79s.; August, 78s. per cwt.

Correspondence

Letters should be written on one side of the paper only. Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor

Soda

Sir,—In your interesting note on Brookes's "General Practice of Physic" (*C. & D,*. June 29, p. 802) is a reference to "soda" which again raises the question as to its derivation. All that the S.O.E.D. ventures to say is that it is a mediæval Latin word of unknown origin. A most exhaustive brochure was written by Mr. Walt Taylor and published by the Clarendon Press (S.P.E. Tract 38, 1933), entitled "Arabic Words in English." Among the forty words in the section of medical and surgical terms appears "soda" with the meaning "headache," in which sense Mr. Taylor indicates it was first employed in England in 1540. The earliest date given for its use in connection with the ashes of plants, according to the O.E.D., is 1558. At the end of the seventeenth century and in the first half of the eighteenth "soda" was used indifferently for cephalalgia and the "azdor ventriculi," as appears from Blancard's "Physical Dictionary" and Barrow's "New Medicinal Dictionary." Apparently its medical use preceded its chemical use in this country, and its origin is to be sought in Arabic literature.—Yours, etc.,

William Kirkby.

Matlock.

Irish Pharmacy—A Look Round

Sir,—Recently a column appeared in each of the Dublin morning papers drawing attention to the manner in which the poisons and pharmacy laws were being administered, and winding up with a statement that the police would see to their due observance in the future. This piece of news has caused some furious thinking among the knights of the mortar and pestle. It has tickled the ears and stirred the conscience of many who read it. A number of men will realise for the first time that these laws actually exist. Those who have been observing the law will have nothing to fear. Section 17 will cause a lot of heart-burning and will need close study. A proper interpretation of this Section by competent authority is needed. The words, "Shall personally manage and conduct such shop" may cause trouble; men will want to know where their responsibility to the law begins and ends. The shops of chemists and druggists are to be subject to the supervision of the police just like those of licensed traders, but without their privileges and protection. Not every person may sell intoxicating drinks; those only with a State licence may do so. Any ignoramus may sell medicines and drugs. There is no limit to the numbers. This latter is against public interest and safety. Every shop in the Free State, including the public house, is doing so. It is not to be wondered at that chemists complain of hard times and unfair competition. The total population of the Irish Free State is slightly over 3,000,000, and when we consider it has the second highest number of shops per head in Europe it is an amazing fact how some chemists manage to exist. The market is definitely limited to that population, and with so many others selling their lines very little is left for the chemist. Manufacturers as well as young licentiates should take note of the above facts and remember that there is "no law of continuous expansion" in retail pharmacy. The number of licensed premises is strictly controlled by the State. When a man finishes his time in one of them he cannot look round and take the first vacant shop he sees and set himself up in business. The wretched state of pharmacy here permits the neophyte with the odour of Mount Street still fresh on him to "butt in" where he imagines he sees an opening and where generally speaking there is no room for him. He discovers the truth of this latter fact for himself in a very short time after opening his establishment. Very little is being done to face up to reality and help to straighten matters out. The Council jogs along, still toying with the apprenticeship question. Men can still obtain apprentices on their own terms, keep them for four years, or turn them out after two or three and take in fresh ones, thus creating further opposition for themselves in days to come. One would think members of the Council had no practical experience of retail pharmacy, and that the problems facing the man keeping open shop were no concern of theirs. It is not a surprising thing that assistants are agitating for better conditions. They will be the proprietors of the future; they are well aware of the unhappy conditions which exist and the causes thereof. They have estabished their own union, affiliated to the larger ones and with representation on the Trades Union Council. It is within their province to prepare the way for better hours and living wages by using all their power and influence in getting back the lost business in drugs and medicines where it should be, in the shops in which they are working. When that has been accomplished, then may they justly ask for shorter working hours and better wages. If the opposite course be taken first, proprietors will be obliged to raise the prices of drugs and medicines to the buying public in an effort to meet their demands. Net result—more unemployment among assistants and in these lean times more business for the sixpenny stores and outside shops, which will quickly seize their advantage and make further inroads into the dwindling business of their masters. The one hope I see is the active and progressive work of the commercial body, the D. and P.R.D.A., whose new name will be the Irish Drug Association. That voluntary body is working on right lines, gradually but surely bringing about a change of heart and mind among its members and making them realise that the common good is very closely allied to a man's personal welfare and his business success.

Yours, etc.,
B. A. Handyman (1/7).

Subscribers' Symposium

For interchange of opinion among "C. & D." readers and brief notes on business and practical topics.

Bygone Remedies

The letter of "Emeritus" on headache and rheumatism remedies of bygone years (*C. & D.*, June 22, p. 768) is very interesting. The following headache remedy was used in the 'nineties. A little ether was sprinkled on the scalp and gently massaged. The effect was magical and relief was immediate. I knew a pharmaceutical chemist who practised this "art" with success.—*Scotia* (25/6).

A Puzzling Order

The following is the correct transcription of the order reproduced in facsimile in our issue of June 15 (p. 732):—

Please supply cylinder of
oxygen
and oblige.

We have not yet received an accurate rendering of this exceptionally difficult order.

Phenacetin

Your correspondent "Emeritus" [*C. & D.*, June 22, p. 768] is probably correct when he says that he first dispensed phenacetin in 1888, as this product was evolved by and put on the market by the Bayer Laboratories in 1887. The discovery of phenacetin filled a long-felt want, as it was found to be considerably less toxic pharmacologically than its forerunner, acetanilide. . . .—*Bayer Products, Ltd.*, Africa House, Kingsway, London, W.C.2.

About the years 1897 to 1900, during my apprenticeship, we kept both phenacetin and phenazone always ready in cachets (gr. x.) for any customer who came in with a request for something for a headache. Now we seldom use these, aspirin being accepted as the universal remedy. One powder often used in those days was a mixture of quin. sulph. and ferri perox. hydrat., supposed to be specific for neuralgic headache. In general I have found that customers prefer a draught to tablets or powders, and with a little experience one can suit the draught to the case without using synthetics. I have noticed that whereas in the years I have mentioned nothing less than gr. x. of phenacetin or phenazone was given, the tendency now is for much lower doses.—*Tatemal* (2/7).

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

C. H. C. (18/60).—SPONGE BLEACHING.—For sponge bleaching immersion in dilute acids or weak solution of potassium permanganate and subsequent treatment with sulphurous acid are the methods employed. The degree of bleaching is determined by the time the sponge is in the chemicals. The following processes are given in "Pharmaceutical Formulas," Vol. II: Immerse the sponges in a bath made by dissolving 2 dr. of potassium permanganate and 2 oz. of hydrochloric acid in 2 gall. of water. A few minutes' immersion suffices to make the sponges almost white ; then remove, press, and wash in cold water, finally soaking in an akaline bath (potassium carbonate 1 lb. to 2 gall.) to restore the colour. Aniline orange is sometimes used finally. Ammoniated solution of hydrogen peroxide is also useful for this purpose, and does not attack the sponge in any way.

D. B. C. (20/68).—SKELETON LEAVES.—The process to which you refer is as follows:—

Prepare a solution of

Chlorinated lime	5 oz.
Sodium carbonate	6 oz.
Water	2 oz.

Dissolve the soda in warm water, strain through muslin, and add the chlorinated lime. The leaves are boiled in the solution until only the mid-rib and veins remain. They should then be washed in water and dried between blotting paper. No further treatment is necessary. Where leaves are of a very thin texture it is best not to boil, but to macerate them ; boiling only takes about ten minutes, but the macerating process takes days or even weeks. It is said that leaves containing tannin do not prove amenable to this treatment.

J. L. (20/68).—DOG'S WHISKERS.—Artificial aids are unlikely to make the dog's whiskers grow longer and stiffer unless there is a sufficient hereditary predisposition first. Then encouragement may be given by rubbing the parts with a stimulating ointment—e.g., adeps lanæ hydrosus softened by admixture with soft paraffin. The modern result has been obtained by inter-breeding of different varieties.

S. P. S. (20/68).—EYEBROW FIXATIVE.—A liquid on the lines of a setting lotion such as the following would seem to be what is required:—

Tincture of benzoin	1 oz.
Castor oil	20 ♏
Industrial spirit	20 oz.
Water	6 oz.

C. J. (20/68).—SPECTACLE CLEANING SOLUTION.—A suitable liquid would be a dilute solution of lin. saponis. More elaborate preparations could be made with, say, triethanolamine but we doubt if they would be more effective.

E. J. R. (25/68).—SUNBURN.—For the type of preparation you require the most suitable dye is waxoline brown. The best way of employing the dye would be to incorporate it in a vanishing cream or an emulsion of the milk of almonds type. The following is a formula for a liquid preparation:—

Agar agar	4 parts
Glycerin	40 parts
Rose water	60 parts
Aesculin	5 parts
Extract of tormentilla	40 parts

E. H. B. (19/68).—WEEDS ON FOOTPATH.—Caustic soda would probably be the most satisfactory for removing the moss and slime on the path, but as there is risk of a detrimental effect on the shoe leather of members of the public it would perhaps be preferable to use occasionally a 2½ per cent. sodium chlorate solution. A 5 per cent. copper sulphate solution might be satisfactory.

R. W. (12/3).—MOTOR CAR POLISH.—This appears to consist of silica gel (say 12 per cent.), kerosene (say 38 per cent.), and water (say 50 per cent.), and a little amyl acetate to give it a characteristic odour. Silica gel is silica dioxide in colloidal form.

A. K. (6/6).—FRENCH DOCTORATE IN PHARMACY.—The Doctorate in Pharmacy in the University of Nancy is, as is usual in the French Universities, of two forms: there is the State Doctorate, open only to French citizens, and which is a qualification to practise pharmacy in France, and the Doctorate of the University, which is available to foreigners. In order to obtain the latter, one must hold the equivalent of the diploma of the First Class of Pharmacist in France. A. Ph.C. might be exempted. The next step is to matriculate, i.e., to enrol at the University, and get in touch with the Dean of the Faculty of Pharmacy. Having discovered the inclination of the candidate, he assigns him to the appropriate professor, who gives him a subject for investigation. The actual research may be carried out either in the laboratories of the University, or elsewhere, but under the direction of the professor. The research having been completed, and the thesis having been submitted to the Dean, the Rector of the University authorises its printing. Eighty copies are retained by the University. The candidate must then sustain his thesis in public, of course, in French.

L. P. (7/58).—SOAPLESS WET SHAMPOO.—The following formulas for liquid soapless shampoos were published in an article on this subject in the *C. & D.*, 1934, I, 238:—

Sulphonated lorol liquid NH	16
Concentrated infusion of chamomile ...	4
Water-soluble perfume	sufficient
Water	to 100

To make this preparation, dissolve the sulphonated lorol liquid NH in the bulk of the water, warming slightly if necessary. Then add the infusion and the perfume, and make up to the stipulated volume by addition of more water. Owing to the higher solubility of sulphonated lorol liquid TA, more concentrated solutions can be made without fear of opalescence or sediment forming. For example:—

Sulphonated lorol liquid TA	30
Concentrated infusion of chamomile ...	10
Water-soluble perfume	Sufficient
Water	to 100

W. R. W. (2/68).—ARTIFICIAL MANURE.—The following is a formula for an artificial manure for general use:—

Ammonium sulphate	28 lb.
Superphosphate 30 per cent.	56 lb.
Steamed bone flour	14 lb.
Potassium sulphate	14 lb.

Apply at the rate of 3 oz. per square yard.

K. & S. (19/68).—RABBIT PEST.—Calcium cyanide (cyanogas) is generally considered the best agent for the wholesale destruction of rabbits. An alternative method was explained in the *C. & D.*, May 25, p. 640.

Retrospect of Fifty Years Ago

Reprinted from
"The Chemist and Druggist," July 15, 1885

Pharmaceutical Research

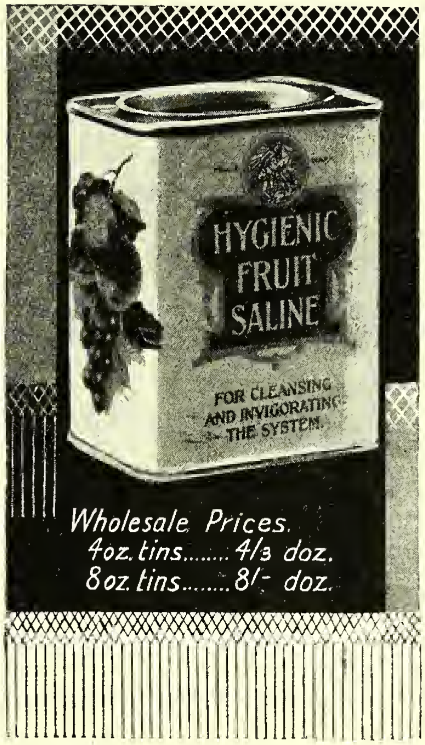
The proposal submitted to the Pharmaceutical Council by the president at the last meeting to set about the task of promoting systematically some form of pharmaceutical research deserved, we think, a somewhat more cordial reception than it received. . . . The [Pharmaceutical] Society has ample funds and can command plenty of earnest and able recruits, who might and could do actual, although in a sense intangible, service for the body of those who practice pharmacy as a means of livelihood. If pharmacy be anything beyond mere buying and selling, the present position of the Society may be said to impose on it such a duty. And that duty ought to be carried out generously and with full intention of obtaining results, and not with a half-hearted sceptical dilettantism, as an experiment which is extremely likely to fail. . . . The reports of such a laboratory should be published much more frequently than once a year, as is now proposed. . . .

Packed in an Attractive Carton
Retails at 1/9 .... P.A.T.A.
Wholesale 11/6 per doz. net

SEASONABLE
SALINES
FOR THE SUMMER SEASON

These well-known Salines are attractively packed and readily sell wherever they are stocked

Reductions
for Gross Lots



Wholesale Prices.
4oz. tins........ 4/3 doz.
8oz. tins........ 8/- doz.

Wholesale Prices
4 oz. tins 3/9 per doz.
6 doz. lots 3/6 per doz.

Meggeson
and Co. Ltd.

BERMONDSEY, LONDON, S.E.16.

MAKERS OF MEDICATED LOZENGES FOR OVER 130 YEARS

Telephones, BERmondsey 1741 and 1742
Private Branch Exchange

STURGE CITRIC ACID

MANUFACTURED UNDER STRICT
SCIENTIFIC SUPERVISION ENSURING
ABSOLUTE AND UNVARYING PURITY

JOHN & E. STURGE, LTD., 1 WHEELEYS ROAD, BIRMINGHAM 15

MANUFACTURERS OF FINE CHEMICALS SINCE 1823

HOPKIN & WILLIAMS Ltd.

SECOND EDITION
"ORGANIC REAGENTS FOR METALS"

A SECOND, REVISED AND ENLARGED EDITION OF THIS PUBLICATION DESCRIBES THE USE OF 26 ORGANIC SUBSTANCES IN THE DETECTION AND DETERMINATION OF METALS

107 Pages *Price 1/6 post free*

16-17 Cross St., Hatton Gdn., E.C.1

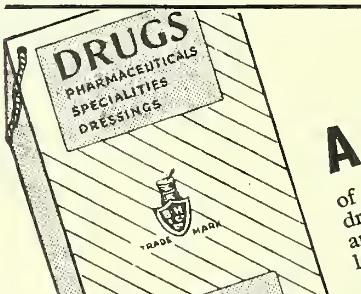
A. & M. ZIMMERMANN
Petri Bros. Ltd. Proprietors

CHEMICALS
Pharmaceutical
Technical
Chlorophyll
all
Grades

CHEMICALS DRUGS ESSENTIAL OILS

COD LIVER OIL
Medicinal
and Cattle
Marseilles Soap

3 LLOYDS AVENUE
LONDON. E.C.3



A CATALOGUE

of drugs, pharmaceuticals, specialities, dressings, vaccines, sera, injections and sundries, analytical, bacteriological and microscopical requirements.

More than a catalogue—

AND HANDY REFERENCE GUIDE

If you would like a copy, please write to BLACKWELL, HAYES & Co., Ltd., Birmingham, whose 59 years' experience in serving the medical profession is always at your command.

ALKALOIDS

FINE CHEMICALS AND OPIUM DERIVATIVES

Goods covered by Dangerous Drugs Acts offered subject to all regulations

Aloin · Atropine · Bismuth Salts · Caffeine · Cantharidin Capsicin · Chloroform · Chrysarobin · Codeine · Diamorphine Emp. Canth. Liq. · Ephedrine · Ergotin · Eserine · Ethylmorphine · Gingerine · Hyoscyamine · Jalap Resin · Leptandrin Morphine · Opium · Podophyllin Resin · Salicin · Santonin Scammony Resin · Strychnine · Veratrine and other Pharmaceutical Chemicals and Preparations.

T. & H. SMITH LTD.

25 CHRISTOPHER STREET, LONDON, E.C.2

Blandfield Works,
Edinburgh,
32-34 Virginia St.,
Glasgow

Hubbuck's Pure Oxide of Zinc

is made by sublimation and is warranted to contain upwards of

99·9 PER CENT.

of pure oxide; in fact, the impurities are not traceable

Sold by the following Wholesale Druggists in Boxes of **7** *lb. and* **14** *lb. stamped by the Manufacturers: also in* **1**-*lb. Boxes and* **1**-*lb. Glass Bottles:*

Allen & Hanburys, Ltd.
Ayrton, Saunders & Co., Ltd.
Bell, Jno., & Croyden
Bell, John, Hills & Lucas, Ltd.
Bleasdale, Ltd.
Boots Pure Drug Co., Ltd.
British Drug Houses, Ltd.
Brook, Parker & Co., Ltd.
Burgoyne, Burbidges & Co.,
Butler & Crispe Ltd.
Cockburn & Co., Ltd.
Dakin Brothers
Duncan, Flockbart & Co.
Evans, Gadd & Co., Ltd.
Evans Sons Lescher & Webb, Ltd.
Ferris & Co.
Gale & Co.
Glasgow New Apotbecaries Co.
Goodall, Backhouse & Co.
C. R. Harker, Stagg & Morgan, Ltd.
Harkness, Beaumont & Co., Ltd.
Hatrick, W. R., & Co.
Hirst, Brooke & Hirst
Hodgkinson, Prestons & King
Horner, L. A., & Sons
Huskisson, H. O., & Co.
Lofthouse & Saltmer, Ltd.
Mackay, Jno., & Co., Ltd.
May, Roberts & Co., Ltd.
Oldfield, Pattinson & Co.
Pinkerton, Gibson & Co., Ltd.
Potter & Clarke, Ltd.
Raimes & Co.
Raimes, Clark & Co., Ltd.
Rankin & Borland
Silversides, R. B. G.
Smith, T. & H., Ltd.
Southall Bros. & Barclay, Ltd.
Sumner, R., & Co.
Taylor, Jas. (Trongate), Ltd.
Thompson, John, Ltd.
Wilkinson & Simpson, Ltd.
Willows, Francis, Butler & Thompson, Ltd.
Woolley, Jas., Sons & Co., Ltd.
Wright, Layman & Umney, Ltd.
Wyleys (Lim.)

Barry, E. J., New York
Finlay Dicks & Co., New Orleans
E. Fougera & Co., 90-92, Beekman Street, New York
Chas. L. Huisking & Co., Inc., 155, Varick St., New York
Lehn & Fink, Inc., N. York
McKeeson & Robbins, Inc., New York
Muth Brotbers & Co., Baltimore
Palmers, Ltd., Montreal
S. B. Penick & Co., Inc., New York
Roller & Shoemaker, Philadelphia
Schieffelin & Co., Inc., New York
Shoemaker & Busch, Pbiladelphia

Thos. Hubbuck & Son, Ltd.
ESTABLISHED 1765
24 Lime Street, London, E.C. 3
MANUFACTURERS OF WHITE LEAD, WHITE ZINC, PAINT, OILS, COLOURS, VARNISHES, &c.
Australian Office: *34 Queen Street, Melbourne*

BAUMOL

MEDICATED SOAPS

Carbolic
Coal Tar
Biniodide of Mercury
Ichthyol

Duncan

Menthol
Sulphur
Resorcin and Salicylic
Sulphur and Salicylic

THESE SOAPS ARE INVALUABLE IN DERMATOLOGICAL PRACTICE

Particulars and Prices on application

DUNCAN, FLOCKHART & CO.
EDINBURGH and LONDON
104 Holyrood Road
155 Farringdon Road, E.C. 1

Paraffinum Liquidum B.P.

ALL GRADES
SAMPLES & PRICES
On application to

ALSO TECHNICAL QUALITIES

WHOLESALE ONLY

Sterns Ltd.
16, Finsbury Sq. London E.C.2
Telephone: National 7644 (7 lines).
Telegrams: Centumvir, Phone, London.

Change of name

EFFALKA

Owing to confusion with another trade mark, the name of this antacid preparation has been changed to

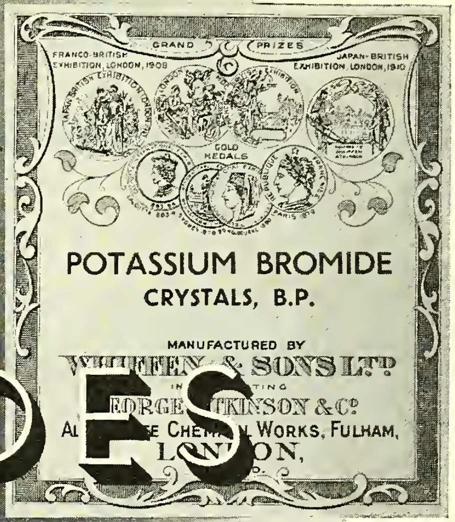
EFFALGEN
(TRADE MARK)

It is available in two sizes, i.e.,
2 oz. bottles at 2/- *and* 14 oz. jars at 10/6

HARWOODS CHEMISTS LTD.
WATFORD, HERTS

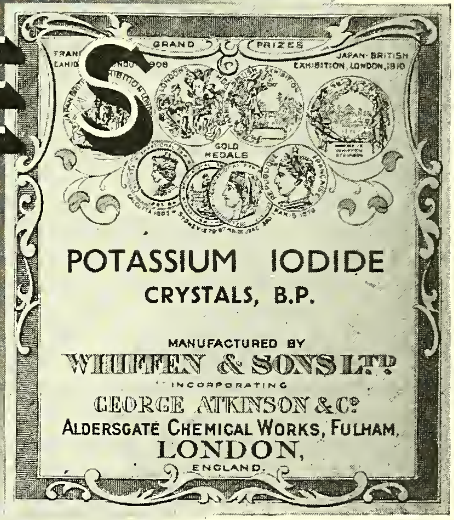
WHIFFEN

ALKALOIDS AND FINE CHEMICALS



BROMIDES

IODIDES



DRUG GRINDING, ESSENTIAL OILS, VERMILION

WHIFFEN & SONS LIMITED, FULHAM, LONDON, S.W.6

TELEGRAMS: WHIFFEN, LONDON TELEPHONE: FULHAM 0037

INCORPORATING GEORGE ATKINSON & COMPANY • ESTAB. 1654

PARAFFINUM LIQUIDUM B.P.
HIGH VISCOSITY

TECHNICAL WHITE and HALFWHITE OILS

WHITE PETROLEUM JELLY
PHARMACEUTICAL AND TECHNICAL Qualities

HOLROYD'S
OIL & CERESINE COMPANY LIMITED
3 NEW LONDON ST., LONDON, E.C.3.
TELEPHONE: ROYAL 5126-7
TELEGRAMS: ERRIKOLROY, FEN, LONDON.

BRADY & MARTIN, LIMITED
Manufacturers of
GALENICALS, MILLED OINTMENTS, CAPSULES, PILLS, TABLETS, MALT EXTRACTS, &c.
For fuller particulars consult page 57
THE CHEMIST & DRUGGIST DIARY, 1935.
NORTHUMBERLAND ROAD, NEWCASTLE-ON-TYNE 2

TABLETS, PILLS, LOZENGES
We are manufacturers for the Wholesale Trade.
If you buy large or regular quantities, please write for quotations.
BROOK, PARKER & Co. Ltd., BRADFORD

PHOSPHATE OF SODA, Pure
For Food Purposes
ASK FOR SAMPLE AND PRICES
PERRY & HOPE, LTD.
Forth and Clyde Chemical Works, NITSHILL
Telephone: Giffnock 414 (2 lines). Telegrams: "Perryope Nitshill."

JONES *for* **METHYLATED SPIRIT**
ALL STRENGTHS IN STOCK
PROMPT DELIVERIES IN CASKS, DRUMS OR TANK LORRY
Send your enquiries to
JONES & CO. *(METHYLATORS)* Ltd., Bow, London, E. 3
Telegrams: "Methspirit, London."
Telephone: Advance 3210 (2 lines)

FERBER CAPSULES

AMMONIATED QUININE CAPSULES, 60m.
Packed in Decorated Tins, in Attractive Show Outers.
No. 378. 10/6 per doz. tins.

BLENOSAN CAPSULES
Santal Oil and Oleo Resin Kava Kava Comp.
No. 169. (Minimum Retail 4/6.) 36/- per doz. tins.

CARBON TETRACHLORIDE CAPSULES
Specially purified, free from Sulphur.

CHILBLAIN CAPSULES
Calcium Lactate, 5 grs.
In boxes of 24. 7/- per doz.

CINNAMON & QUININE CAPSULES
Packed in Decorated Tins, in Attractive Show Outers.
No. 379. 10/6 per doz. tins.

COD-LIVER OIL CAPSULES
No. 214. 24 × 15 m. 8/- per doz.

COD-LIVER OIL AND CALCIUM PHOSPHATE
No. 217a 24 × 10 m. 6/6 per doz.

DOG CAPSULES
Aperient
Diarrhœa
Mange
Worm
Antibilious
Cough
Epilepsy and Chorea
Tonic
Alterative
Condition
Distemper
Rheumatic
For Medium and Large Dogs, 8/6 per doz. tubes.
For Puppies and Fancy Dogs, 6/6 per doz. tubes.

ERGOT PREPARED
Dry filled Capsules, N.F.
No. 258 24 × 5 gr. 12/- per doz.

FERBER CAPSULE No. 600
Containing Blaud's equal to 2 pills. Arsenical Solution 2 minims.
Ext. Nucis Vom. ¼ grain. Phenolphthalein ¼ grain.
Packed 100 in decorated tins. 31/- per doz. tins.
Minimum Retail 5/- per tin.

HALIBUT LIVER OIL CAPSULES
Packed in Decorated Tins, in Attractive Show Outers.
No. 290a 24 × 3 m. 9/- per doz. tins.

HALIBUT LIVER OIL CAPSULES WITH VIOSTEROL 250 D
Standardised to a Vitamin A potency 60 times that of the finest Cod Liver Oil with the addition of Viosterol to increase the Vitamin D centent to 250 D.
Packed in Decorated Tins, in Attractive Show Outers.
No. 293 24 × 3 m. 24/- per doz. tins.

OPHTHALMIC CAPSULES
Hydrarg. Ox. Flav. 1%
" " " 2%
Boric Acid 10%
Atropin 1%
Argyrol 1%
Protargol 1%
In boxes of 3, 12/6 per doz. boxes.
In boxes of 6, 18/6 per doz. boxes.

SANTAL OIL CAPSULES
No. 393. Tins, each 24 × 10 drops. 18/6 per doz.
No. 392. Tins, each 24 × 10 minims. 22/- per doz.

SPECIAL CAPSULES FOR LADIES
Packed in Decorated Tins, in Attractive Show Outers.
No. 109. Apiol, Aloes and Iron. 9/- per doz. tins.
Etc., Etc.

ROBERT FERBER LTD.
Carlton Works, Asylum Road
LONDON, S.E.15

YOUR COLLEAGUES TELL YOU

"*Easily exceeds the sale of all other laxatives combined*"
"*Steady increase in sales*"
"*Very pleased with steady sales*"

FACTS which speak for themselves . . .

LONDON, E.1
"The sale of 'Ex-Lax' in this one shop has reached the amount of one 54/-parcel per week, easily exceeding the sale of all other laxatives combined." 11.3.35

SUSSEX
"You give Chemists preference in terms and advertising and I am glad to report a steady increase of 'Ex-Lax' sales. I push it whenever I can. "Best thanks for your co-operation" 19.3.35

OXFORD
"We are very pleased with the steady sales of 'Ex-Lax' and the show material you provide for us, and usually have it conspicuously displayed." 20.5.35

IT WILL PAY YOU TO DISPLAY

EX-LAX BRAND

Write to-day for Display Material to
EX-LAX LTD., SLOUGH, BUCKS

To owners of

PROPRIETARY LINES

LIQUIDS, TABLETS, PILLS, &c.

Our Factory is equipped with the most modern plant for tablet and other special formula work, and is capable of an exceedingly large output. We manufacture from private formulæ or from customers' own ingredients. We offer expert advice, efficient service, and absolute fidelity to formula, with strict secrecy.

Enquiries from any interested Principals invited.

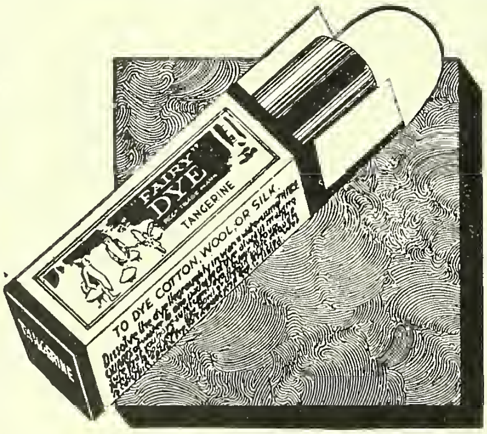
MENLEY & JAMES, LTD.
P.O. BOX 12A
64 Hatton Garden, London, E.C.1

5 Good Reasons for Stocking "IODEX"

BRAND IODINE OINTMENT

1 "Iodex" is prescribed daily by many doctors throughout the world.
2 Sales are maintained by regular advertising to the medical profession—by direct mail and in the medical press.
3 The counter-prescribing possibilities of "Iodex" are enormous. It is excellent treatment for strains, sprains, bruises, burns, cuts, and swollen or painful joints and muscles.
4 "Iodex" shows you a good margin of profit.
5 It is the only entirely efficient, non-irritating and non-staining iodine ointment. It has no serious rival.

MENLEY & JAMES, LTD.
64 Hatton Garden, London, E.C.1



It pays to Concentrate on Advertised goods

FAIRY DYES

are well advertised in the National Press and Ladies' Journals. They meet with a large and steadily increasing demand.

Sold at the popular price of 2d. per tube retail—attractively packed. 31 shades and colours.

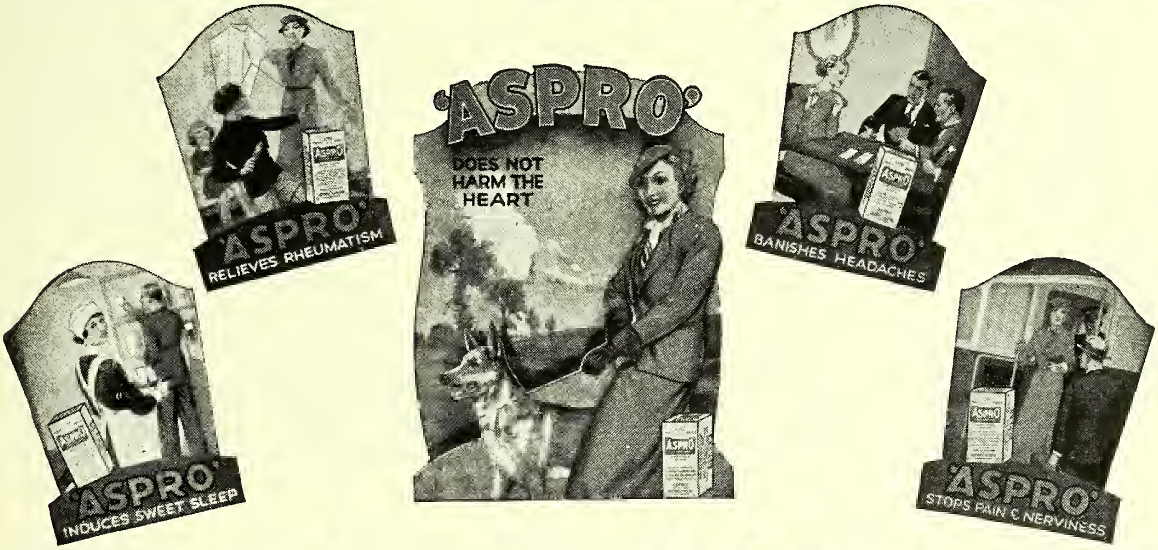
See that your stocks are up-to-date.

LONDON DEPOT:
292 UPPER STREET, ISLINGTON, N.1

FAIRY DYES, LTD., GLASGOW, N.W.

Fairy Dyes

THIS DISPLAY SELLS 'ASPRO'



& BRINGS CUSTOMERS INTO YOUR SHOP

The window display illustrated above definitely sells 'ASPRO'. It connects up with the largest advertising campaign of its kind in the world. When you display it, you get the benefit of 'ASPRO' advertising just as though you paid for the advertisements yourself—the non-displayer loses customers and loses profit. The present change of the weather conditions is causing a great demand for 'ASPRO'. We suggest, therefore, that if you have an 'ASPRO' display you show it. If you have not one—then write us to-day, and we will send the above set by return of post. Do not forget, either, the 'ASPRO' service of Chemists' envelopes and bags. They are good business pullers—they save you money. Let us assure you here that our sales activities are being vigorously pushed. House-to-house broadsheeting is in operation, backed by heavy national advertising. We advertise 'ASPRO' continuously. If you keep on displaying 'ASPRO' advertising material, 'ASPRO' customers will keep on coming to you.

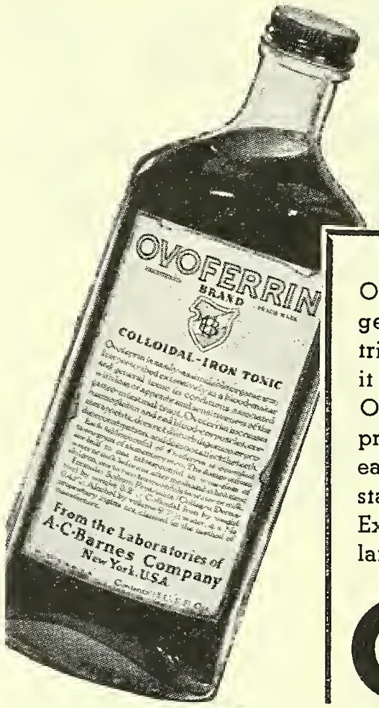
AN 'ASPRO' WINDOW STICKER

'ASPRO' consists of the purest Acetylsalicylic Acid that has ever been known to Medical Science, and its claims are based on its superiority.

Agents: GOLLIN & CO. Pty. Ltd.
('ASPRO' DEPT.)
SLOUGH, BUCKS. Phone: Slough 608

Made by ASPRO LTD., SLOUGH, England
No proprietary right is claimed in the method of manufacture or the formula.

'ASPRO' REG. TRADE MARK



Retails at 4/-;
trade price 36/- per dozen.

Increase your SALES and PRESTIGE!

Ovoferrin is recognised by authorities on iron therapy as the perfect general tonic for anaemia, debility, convalescence, asthenia, malnutrition and nervous disorders. The medical profession are prescribing it increasingly day by day.

Ovoferrin is tasteless, odourless and non-constipating, and provides a proper and adequate supply of iron in a truly colloidal condition, easily assimilated by the most sensitive digestive system and does not stain the teeth.

Extensive advertising in the medical papers, supplemented by circularising and direct calls on doctors, will help to create a brisk demand.

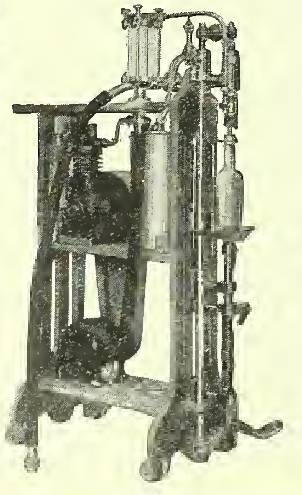
OVOFERRIN

Prepared by makers of 'Argyrol' *Trade mark* BRAND COLLOIDAL IRON TONIC

Sole Distributors:
FASSETT & JOHNSON, LTD., 86 CLERKENWELL ROAD, LONDON, E.C.

ROBERTS' PATENT

"LEO" VACUUM FILLER



for Glass, Stone, and Tin Bottles. Fills all sizes from drachm to quart—long, short or sprinkler neck.

Clean and Rapid
No Over Filling
Broken Bottles Rejected
Easy to Clean
Self Rinsing

WRITE FOR PARTICULARS

Roberts' Patent Filling Machine Co.
T. ROBERTS, Proprietor,
33 Roundcroft Street, Bolton, Lancashire
Makers of every description of Bottle Filling and Shallow Jar and Tin Filling Machine for the Chemists' use.
ALL RIGHTS RESERVED

"SEAJOY" BONUS

JUNE 17th to JULY 17th

"Seajoy" Anti-Seasick Plaster
Regd.

13 to the Dozen. 62% on Cost.
Retail 3/- each. Cost 24/- per dozen.

Through your Wholesaler or direct from
"Seajoy" Co., Putney, S.W.15
Telephone: Putney 0414

It will pay you to stock them!

When the public demand goods bearing a specified name the wide-awake retailer prepares to meet that demand and so reap the benefits which follow.

IGLODINE has become a household word, and the public, through satisfaction which comes after trial, are demanding **IGLODINE PREPARATIONS.** Are you the retailer who is preparing to meet the demand?

·Iglodine·

The Safe and Sure Antiseptic

Write to-day for full particulars to:
THE IGLODINE CO., LTD. - Newcastle-on-Tyne

Doctors Prescribe LACTOGEN . . . the Mothers buy from You

Doctor obtains spectacular results from Lactogen

"I have used and prescribed Lactogen extensively and can positively state that not only have results been entirely satisfactory, but even spectacular. I am sure many babies under my care have literally been 'pulled out of the fire' by Lactogen. The airtight method of packing is a great improvement." M.R.C.S., L.R.C.P., Lond. TESTIMONIAL NO. 1012.

Your Lactogen sales rest on the firm foundation of strong Medical support. Everywhere Doctors are keenly recommending Lactogen, and thousands of thankful parents are making new Lactogen customers. That is why sales of Lactogen have increased so enormously during the last few years. Lactogen makes a useful addition to your turnover. Stock, Show and Sell—

BETTER MILK FOR BABIES—"LACTOGEN"

REGD. TRADE MARK

2/9 PER TIN P.A.T.A

- Send to-day for full particulars and terms to the Lactogen Bureau (Dept. AZ 141), Nestlé and Anglo-Swiss Condensed Milk Co., 6 & 8 Eastcheap, E.C.3.

Lactogen—prepared by Nestlé's—is a modified dried milk for use in infant feeding.

Copyright

A SCIENTIFIC COMBINATION OF MATURED WINE AND FRESH EGGS

Here is a really good all-round restorative which merits your confident recommendation, and can be sold by all licensed chemists. It is regularly prescribed by the medical profession.

EGG-NOG

(*mist. spt. vini. gallici*)

THE SUPREME TONIC RESTORATIVE

Retail Prices :
per bottle - - - 5/6
per ½ bottle - - 3/-

We will gladly send a FREE SAMPLE and descriptive literature to any Chemist with a Wine Licence.

LAMB & WATT LTD
LIVERPOOL 3

London enquiries to Sangers Ltd., 258 Euston Rd., N.W.1

INSTITUTE OF HYGIENE
INCORPORATED BY ROYAL CHARTER
CERTIFICATE AWARDED IN RESPECT OF "DORSELLA" MILK FOOD

ENGLISH DRIED MILK

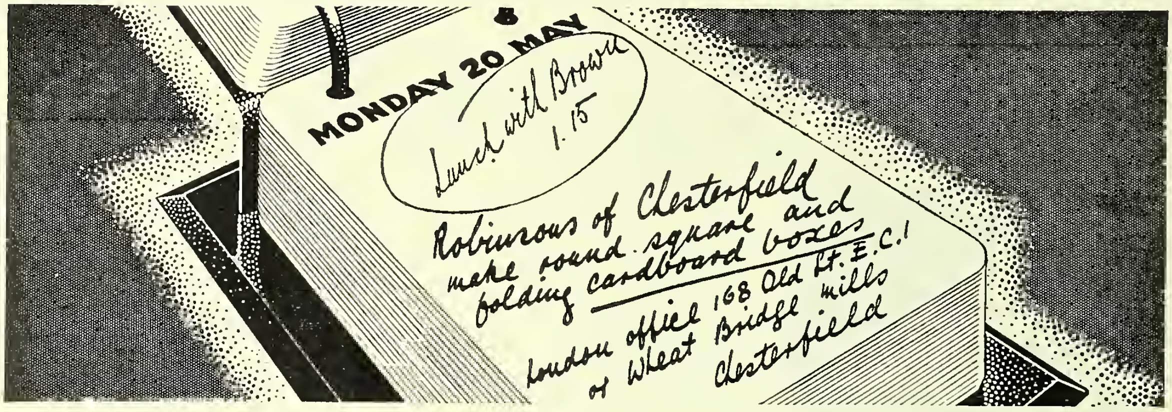
Enquiries are solicited for the following:

FULL CREAM "DORSELLA" DRIED MILK
HALF CREAM
SEPARATED "PARAGON"
CASUMEN, SOLUBLE MILK PROTEID
SWEETWHEY, CRYSTALS or POWDER
KENCREAM FOR PUPPIES
UNITA (Dorsella and Casumen)
DRIED BUTTERMILK

Supplied in Bulk, Tins or Cartons

Quotations and samples gladly sent on request.

PRIDEAUX'S, LTD.,
MOTCOMBE, SHAFTESBURY, DORSET
Telephone : Shaftesbury 4


MONDAY 20 MAY
Lunch with Brown 1.15
Robinsons of Chesterfield make round, square and folding cardboard boxes
London office 168 Old St. E.C.1 or Wheat Bridge mills Chesterfield

WESTMINSTER COLLEGE OF PHARMACY

Founder : G. S. V. WILLS, Ph.C. Principal : P. H. WOODNOTH, Ph.C., F.C.S.

DAY CLASSES

Summer Revision Courses commence on July 29th and Aug. 7th. Next Session will commence on October 2nd for Preliminary Scientific and Qualifying Examinations.

POSTAL COURSES

Preparatory Courses in all Subjects. Fee £1-1-0

Special Test Papers are available for revision.

Prospectus for Postal or Day Classes on application to the Principal :

190 Clapham Road, London, S.W.9

'Phone : Reliance 3728

LONDON COLLEGE of Pharmacy

Founded by H. WOOTTON, B.Sc. C. W. GOSLING, Ph.C.
Principal :—IRVINE G. RANKIN, B.Sc., Ph.C.

Specialists in Training Pharmacists

REVISION CLASSES : P.S. and C. & D. for SEPT. Exam. just commencing, **£1 1s. per week**

Postal Courses for Apprentices and Juniors

NEXT SESSION commences OCTOBER 2nd.

Benches now being reserved for P.S. and C. & D.

"Essentials of Pharmacy"

New Edition 6/6 post free.

361 CLAPHAM ROAD, S.W.9

Telephone—BRIXTON 2161

HERIOT-WATT COLLEGE AND ROYAL PUBLIC DISPENSARY EDINBURGH

SCHOOL OF PHARMACY

Under an Agreement between the Managers of the Royal Public Dispensary and the Governors of the Heriot-Watt College, the School of Pharmacy of the Royal Public Dispensary will be transferred to the Heriot-Watt College, and will be incorporated in the existing School of Pharmacy in the College, from the commencement of the Session 1935-36.

Principal of College ...	J. Cameron Smail, O.B.E.
Head of Chemistry Department ...	Professor T. Slater Price, O.B.E., D.Sc., Ph.D., F.I.C., F.R.S.
Head of Physics Department ...	W. Watson, M.A., B.Sc.
Pharmaceutics and Pharmaceutical Chemistry	J. C. Henderson, Ph.C. Eric Knott, Ph.C., F.C.S., and Hugh H. Campbell, B.Sc., A.H.-W.C. A.I.C.
Practical Pharmacy (Manufacturing Processes)	W. F. Martin, F.I.C.
Physics for Pharmacy Students ...	T. G. Malpas.
Botany	I. A. Preece, M.Sc., Ph.D., A.I.C.

With Assistants.

PRELIMINARY SCIENTIFIC EXAMINATION :
CHEMIST AND DRUGGIST QUALIFYING EXAMINATION.

Courses of lectures combined with laboratory and tutorial instruction are provided in all the subjects for the Examinations of the Pharmaceutical Society of Great Britain. The Courses extend over a period of nine months.

Students wishing to enrol should apply to Professor T. Slater Price for particulars at as early a date as possible to secure allocation of places.

Enrolment and payment of Fees : Monday, 14th October, 1935.

Instruction begins on Tuesday, 15th October, 1935.

FEES :—£21 per session of three terms for the Preliminary Scientific Examination or for the Chemist and Druggist Qualifying Examination.

Matriculation Fee : 10s.

Prospectus on application to the Principal.

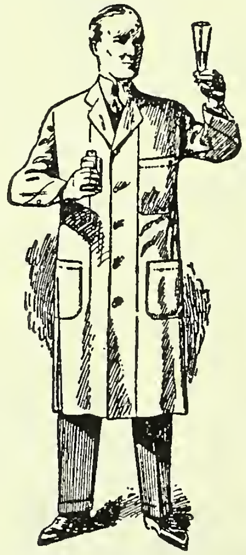
GARDINER & CO. ("THE SCOTCH HOUSE") LTD.

1, 3, 5 Commercial Rd., London, E.1

Phone : BIShopsgate 6751

PROTECTIVE CLOTHING

of Every Kind ; Moderate Prices



Garments well tailored

COATS. Long (as illus.) White Drill, 5/11, 7/6, 9/6, 12/6. Khaki, 5/11, 6/11, 8/6, 9/6, 13/6. Grey, 7/6, 9/6, 11/6. Black, 14/6.

JACKETS. White Drill, 4/6, 5/6, 7/11, Grey, 6/11. Khaki, 7/6, 9/11. Black Poplin, 12/6.

DENTISTS' COATS. Button on Shoulder, Three-Quarter length, Fine White Drill, 12/6, 14/6, 16/6.

LADIES' COATS. Crossover Style, with belt. White, 5/11, 7/11, 10/6. Khaki, 8/11. Coat style, with belt. White, 8/11, 10/6, 12/6. Any colour or design to order. Patterns and illustrated price list on application.

Special Prices for Quantities

Special attention to Post Orders. State Chest Measure and height. Orders for 20/- post free. Cash refunded if not approved. If not A/C, goods sent C.O.D. or on approved reference.

Branches throughout London

FOR BIG BUSINESS

STOCK

BEECHAM PRODUCTS

BEECHAMS BRAND
LUNG SYRUP
FOR COUGHS, COLDS, BRONCHITIS, THROAT & CHEST AILMENTS.
FOR ADULTS OR CHILDREN
DIRECTIONS FOR USE:
For Adults.—Two teaspoonfuls three times a day.
Children over 7.—One teaspoonful three times a day.
Children under 7.—Half a teaspoonful twice a day.
SHAKE THE BOTTLE
A BEECHAM PRODUCT
1/3
LACTO
ACT LIKE MAGIC
BEECHAMS Brand POWDERS
INFLUENZA

BEECHAM PRODUCTS have attained their present popularity through MERIT. Every Chemist and Druggist should participate in the ever increasing demand for BEECHAMS Brand PILLS, BEECHAMS Brand POWDERS and BEECHAMS Brand LUNG SYRUP. They amply repay any selling co-operation extended to them.

BEECHAM PRODUCTS never become dead stock—there are no losses on them—all damaged stock is replaced free—they are protected under P.A.T.A. regulations—yield good profits and are the best paying propositions to handle.

STOCK MORE—
SHOW MORE—
SELL MORE—
BEECHAM PRODUCTS

SHOW MATERIAL SENT ON REQUEST

BEECHAMS PILLS LTD.
ST. HELENS, LANCS.

Awarded Certificate by The Institute of Hygiene for Purity—Quality—Merit

LOCARNO
MEDICATED TOILET ROLL

COSTS 33/- per gross

BRITISH MADE

SELLS AT 72/- per gross

Sales restricted to Chemists

You are sure of repeat orders by selling the "LOCARNO"

Contains 650 sheets of pure white sulphite paper

Free delivery in United Kingdom (Ireland excepted)

Packed in ½ gross cartons

Free sample roll on application

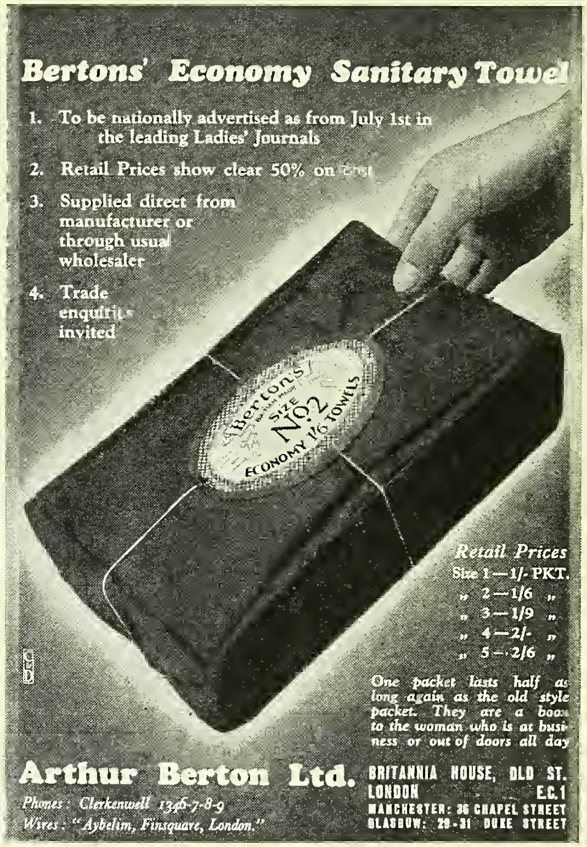
Each Roll 12 oz.

Sole Manufacturers

J. RUTHERFORD & Co. LTD

VICTORIA PAPER MILLS,
VICTORIA RD. HOLLOWAY, LONDON, N.7

CONTRACTORS TO H.M. GOVERNMENT



Bertons' Economy Sanitary Towel

1. To be nationally advertised as from July 1st in the leading Ladies' Journals
2. Retail Prices show clear 50% on cost
3. Supplied direct from manufacturer or through usual wholesaler
4. Trade enquiries invited

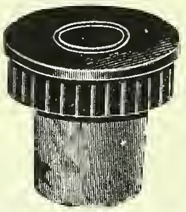
Retail Prices
Size 1—1/- PKT.
„ 2—1/6 „
„ 3—1/9 „
„ 4—2/- „
„ 5—2/6 „

One packet lasts half as long again as the old style packet. They are a boon to the woman who is at business or out of doors all day

Arthur Berton Ltd.
Phones: Clerkenwell 1346-7-8-9
Wires: "Aybelim, Finsquare, London."

BRITANNIA HOUSE, OLD ST.
LONDON E.C.1
MANCHESTER: 36 CHAPEL STREET
GLASGOW: 29-31 DUKE STREET

COMPOSITION STOPPERS
BAKELITE MOULDINGS
COMPACTE COSMETIC & ROUGE BOXES



200 Varieties Any Colour.

A suitable Composition Stopper will enhance the selling value of your package. Let us fit your Bottles and quote you.

W. J. SHARPLIN, Ltd.
Telephone: Mountview 0952
Middle Lane Works, Hornsey, LONDON, N.8

Advertised from January to December and never fails to give satisfaction. Also SU-CAN *Soluble* for instant disposal.

MENE

From your Wholesale House, please.

ROBINSON & SONS LTD. CHESTERFIELD & LONDON

THE DEPENDABLE CONTRACEPTIVE

now available in an economical bulk tube

It is now possible to prescribe Ortho-Gynol to many patients who have hitherto been debarred from its use by reason of cost. A five shilling bulk tube containing sufficient Ortho-Gynol for 15 to 20 applications is now obtainable to the prescription of Medical Practitioners. A refill of the same size but without the unbreakable applicator is available at the price of four shillings. Ortho-Gynol is independent of the variables — time, temperature and moisture.

Bulk Tube and Unbreakable Applicator 5/-
(contains sufficient for 15/20 applications)
Bulk tube only 4/-

ortho-gynol
APPROVED FOR FEMININE HYGIENE (Package A)
ortho gynol
Johnson & Johnson (GT BRITAIN) LIMITED SLOUGH, BUCKS

THE DEPENDABLE CONTRACEPTIVE

Also available in the original box of 6 complete units (each with disposable nozzle): 4/6.
Write for full details and trade terms:

Johnson & Johnson (GT BRITAIN) LIMITED SLOUGH, BUCKS.

Associated Companies: AUSTRALIA: Johnson & Johnson Ltd., 194/200 York Street, N. Sydney. S. AFRICA: Johnson & Johnson (Pty.) Ltd. 20 Pritchard Street, Johannesburg.

Representatives & Agents: INDIA, BURMA CEYLON, SIAM, MALAYA, EAST INDIES: A. A. Burton, P.B. 330, Bombay, India. CHINA & JAPAN: R. T. Down, Post Box 510, Chinese Post Office, Shanghai. SPAIN: A. Amechazurra, Modesto Lafuente 3, Madrid. NEW ZEALAND: Potter & Birks (N.Z.) Ltd., Adco Buildings, 14-24 Lower Federal St., Auckland.

Motor Goggles to suit all Classes in

IMITATION SHELL,

NICKEL FRAMES,

GOLD FILLED FRAMES,

NICKEL FRAMES with ZYLO AND LEATHER CUPS, ETC., ETC.

All Above Fitted with Sun Proof Glasses

To Sell from **1/- to 7/6** pair

THIS SHOW-CARD HAD THE EFFECT OF INCREASING OUR SALES ENORMOUSLY LAST YEAR

WE ANTICIPATE AN INCREASED DEMAND THIS YEAR

TRY A CARD

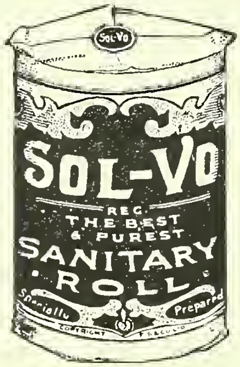
THE MOTORING SEASON IS NOW ON

This Handsome Showcard, 12″×9½″, Printed in Colours, sent Free with each half-dozen Goggles Ordered. Sample Goggles sent.

JOHN BAIRD & SONS, *Wholesale & Manufacturing Opticians,*

Telephone & Extensions: CENTRAL 541
Telegrams & Cables: SPECTACLES, GLASGOW (A.B.C. CODE)
ESTABLISHED 1889

70 MITCHELL STREET,
GLASGOW, C.1



SOL-VO

REGD

TOILET PAPER

PURE - SOFT - HYGIENIC

(Completely Wrapped)

SELLING AIDS.

A display Showcard and "Personal Hygiene" leaflets with every order.
750 perforations to every roll.
No dirty edges, completely wrapped and sealed.

3 Doz. @ 6/- Doz. 6 Doz. @ 5/9 Doz. 12 Doz. @ 5/3 Doz.
CARRIAGE PAID—NET

FORD, SHAPLAND & CO. LTD.

PRINTERS & WHOLESALE STATIONERS,
GREAT TURNSTILE, HIGH HOLBORN, LONDON, W.C.1
Telephone: HOLBORN 4695.

SUMMER IS HERE! *and*

HIKERS are on the road

Be topical with your Displays!

Remind your public that prevention is better than cure

Portia
Regd.

CORN and BUNION PLASTERS
PREVENT
Sore and Aching Feet—
APPLIED IMMEDIATELY.
EXTREMELY ADHESIVE.

PROMINENT DISPLAYS OF

Portia
Regd

CORN AND BUNION PLASTERS WILL REPAY YOU

Obtainable from your usual Wholesaler.

Portia Regd.
WHITE FELT
CORN PLASTERS
THIN ROUND
12 IN A BOX.
KNOWN AS THE BEST THROUGHOUT THE WORLD.
MADE IN LONDON, ENGLAND.
THIN Portia Regd ROUND No. A 300 WHITE FELT CORN PLASTERS
CORNS ARE CAUSED BY PRESSURE
Portia Regd REMOVE THAT PRESSURE WITH A CORN PLASTER
MADE IN VARIOUS SHAPES AND THICKNESSES TO SUIT EVERY OCCASION.

Thin 2/-
Thick 2/6
per doz. cartons

SOLPORT
BROTHERS LIMITED
184-192 Goswell Road, London, E.C.1

The preference of women for Southall's Sanitary Towels brings steady sales all the year round.

The "ORIGINAL" and most popular.
The "CELTEX" soluble, easily disposed of.
The "K" made entirely of absorbent cotton wool, with very soft cover.
The "COMPRESSED" for travelling. A very popular line.

SOUTHALLS (BIRMINGHAM) LTD.

WE SUPPLY

DECORATED TINS

FOR PACKING

OINTMENTS

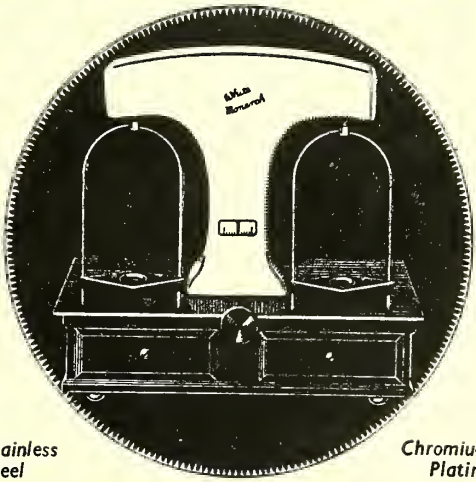
AND OTHER PRODUCTS.

SAMPLES AND PRICES UPON REQUEST.

THE CALDICOT TIN STAMPING WORKS LTD.
CALDICOT, Nr. CHEPSTOW, Mon.

WHITE MONARCH

THE
MODERN ENCLOSED DISPENSING BALANCE



Stainless Steel

Chromium Plating

Entirely protected from dust and fumes by the white porcelain enamelled housing. Strongly made to withstand hard usage and yet retain its sensitivity

ASK YOUR SUNDRIES HOUSE TO SHOW YOU ONE

WILLIAM A. WEBB, Ltd.
4/5 Skinner Street, London, E.C.1

More and more Chemists in Gt. Britain now Sell "Morfi" Products

because

—— they know that these products are all they are claimed to be. Their sale and popularity has been rapid and now they are in demand all over the world . . . . . Morfi products are supplied to Chemists and Druggists only and show an exceptional profit

MORFI TRANSPARENT
27/- gr. Retail 2/6 pkt. 3
MORFI IVORY
24/- gr. Retail 2/- pkt. 3
Carriage paid on all orders of ¼ gross and upwards

SOLE DISTRIBUTOR

HERBERT FROMM

ALDWYCH HOUSE, LONDON, W.C.2

TELEPHONE : HOLBORN 4870

[42/54]

The CHEMIST AND DRUGGIST SUPPLEMENT

This Supplement is inserted in every copy of The Chemist & Druggist

28 ESSEX STREET, LONDON, W.C. 2

JULY 6, 1935

ADVERTISEMENT TARIFF

ALL ADVERTISEMENTS are PREPAID, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

BUSINESSES WANTED and for DISPOSAL, PREMISES TO LET and FOR SALE, PREMISES WANTED, PARTNERSHIPS, GOODS for SALE and AGENCIES—6/- for **50** words; every additional **10** words or less, **6d.** (Box No., **1/-** extra.)

SITUATIONS OPEN—6/- for **40** words; every additional **10** words or less, **6d.** (Box No., **1/-** extra.)

SITUATIONS WANTED—2/- for **18** words; every additional **10** words or less, **6d.** (Box No., **1/-** extra.)

LEGAL NOTICES, TENDERS, AUCTIONS, and all specially-spaced announcements, **1/3** per nonpareil line (12 lines = 1 inch single column). (Box No., **1/-** extra.)

MISCELLANEOUS (Wholesalers') Section for odd and second-hand lots—**10/-** for **60** words: **1/-** for every additional **10** words or less. (Box No., **1/-** extra.)

EXCHANGE COLUMN (for Retailers, etc.)—**Twopence** per word, minimum **2/-.** (Box No., **1/-** extra.)

THE CHEMIST & DRUGGIST, 28 Essex St., Strand, London, W.C.2

Telephone: Central 6565 *(8 lines).* *Telegrams: "Chemicus, Estrand, London."*

CLOSING FOR PRESS

must reach us not later than FIRST POST THURSDAY MORNING

All advertisements intended for insertion in this Supplement

ORRIDGE & CO.

56 LUDGATE HILL, E.C.4

ESTABLISHED 1846 *Telephone Nos.: CITY* 2283 & 7477

May be CONSULTED at their Offices on MATTERS of SALE, PURCHASE & VALUATION

We make no charge to purchasers, and invite intending buyers to communicate with us, stating their requirements

1.—MIDDLESEX (SUBURBAN).—Old-established Business producing net profit of £1,000 per annum; good house and lease; further particulars supplied on receipt of a Banker's reference.

2.—NORTH LONDON.—Working-class Business in main road; returns average £25 weekly; good prices; double-fronted corner shop, with living accommodation; net rent £55; held on lease; price to be arranged.

3.—LONDON, S.W.—Cash retail Business in thickly populated area; returns under management £2,285; net profit £617; living accommodation; rent £100; held on lease; price about £1,650.

4.—WIMBLEDON.—Middle-class Business; well-established; increasing turnover, 1934–35 approaches £1,200; living accommodation and good garden; net rent £55; 17 years' lease unexpired; rates £14; price £650 or near offer.

5.—CLAPHAM JUNCTION (NEAR).—Old-established Drug Store offering scope for large increase, especially under qualified management; main road position; living accommodation; rent £85; 14 years' lease; returns 1934, £812; price £525 all at.

6.—DULWICH DISTRICT.—Very old-established Business for sale on account of Vendor's ill-health; returns last year £1,716 of which £354 was from Optics; main-road double-fronted shop with flat over; rent £100; new 21 years' lease; price about £1,200 or valuation terms entertained.

7.—FINSBURY PARK (NEAR).—Drug Store with Selo and Ensign Agencies; busy main thoroughfare; established 58 years and in present hands 32 years; returns 1934, £1,173; scope for increase; living accommodation; new lease will be granted or property may be purchased; stock alone worth £410; price asked £800; Vendor retiring.

8.—LONDON, S.W.—Middle-class main-road Business; very old-established; returns under management £1,019, increasing; rent and rates £67 18s.; held on lease; stock and fixtures worth £650; price £700 or valuation terms entertained.

9.—BROCKLEY (NEAR).—General retail Business with increasing turnover, present rate about £20 weekly; net rent £59 which includes dwelling-house of 7 rooms and bathroom; held on lease; stock worth about £385; offers invited.

10.—LONDON, W.9.—Main-road Business; established 50 years; returns approximately £2,100 per annum; gross profit over 45 per cent.; Accountant's figures; living accommodation; rent £150 which includes living accommodation and another flat which can be let at £50 per annum; price asked £1,500 or near offer; N.H.I. produces about £500 per annum.

11.—SURREY.—Good-class retail and dispensing Business with good house and nice garden; returns about £1,800 and net profit £400 to £450; audited accounts; rent £125; 13½ years' lease; stock and fixtures worth about £950; price £1,400 or near offer.

12.—NEW MALDEN.—Middle and working-class Business for sale on account of Vendor's ill-health; returns to February 1935 about £1,260; scope for increase; 6-roomed house with bathroom; rent £50 rising to £70; small garden; price about £850.

13.—MIDDLESEX.—Old-established neglected Business for sale on account of Vendor's advanced age and ill-health; living accommodation with bathroom and large garden; rent £50 rising to £70; stock and fixtures worth about £450; scope for Optics; offers invited.

14.—DERBYSHIRE.—Light retail Business producing net profit of approximately £350 a year; rent £52 which includes living accommodation; stock and fixtures worth about £500; price about £700; part payment entertained.

15.—BIRMINGHAM (NEAR).—Cash retail Business; returns approach £700; net profit £180; 4-roomed flat; rent £71 12s.; price £330 or valuation terms entertained.

16.—WORCESTERSHIRE.—Old-established Business returning between £4,000 and £5,000 per annum; large premises; rent £350; stock and fixtures worth over £3,000; further details to genuine purchasers on receipt of a Banker's reference; Vendor retiring.

17.—CHEAM (NEAR).—Middle-class Business producing net profit of approximately £400 per annum; house and garden, room for garage; rent £98; 17 years' lease; price £1,100 or valuation terms entertained.

18.—ESSEX (SEASIDE).—General retail Business with increasing turnover; corner shop with flat over; rent £100; 18 years' lease; net profit last year £335; price required £800; possibly part payment would be entertained.

19.—GLOUCESTERSHIRE.—Family retail Business in pretty district near the Wye; returns 1935, £1,390, increasing; net profit £425; rent £30 per annum only; rates £6; held on renewable lease; house near by available at low rent; price all at £800.

20.—KENT (SEASIDE).—Chemist Business with fair amount of prescribing and own proprietaries; established 1886; returns 1934, £1,480; double-fronted shop in centre of town; living accommodation over; new lease at an agreed rental; price £826 or valuation terms entertained.

Chemists' Transfers, Valuations for Sale, Stocktaking & Probate

Special Terms for Income Tax Valuations and Preparation of Accounts by Qualified Accountants.

ERNEST J. GEORGE & Co.

Bank Chambers, 329 High Holborn, London, W.C.1
Telephone Nos.: Holborn 7406 & 7407 (2 lines)
15 Bridge Street, Walsall Telephone: Walsall 3774

Lancashire and District Representative: Mr. E. BROWN, 21 Davenport Road, Hazel Grove, Stockport. Telephone: Great Moor 2405

Correspondence, mutually confidential, is invited from prospective purchasers of the following businesses at present available for purchase.

(C1) HANTS.—Attractive and beautifully fitted pharmacy with excellent connections, prominently situated in leading seaport town; present returns average approx. £2,500 per annum, but these figures are capable of considerable augmentation, the business being to a large extent undeveloped; excellent stock and valuable fixtures, which together are worth over £2,500; owner is prepared to waive the question of goodwill, and to accept an all-in figure of £2,250, or near offer.

(C2) MIDDLESEX.—Old-established excellent profit-earning business situated in growing area; turnover approximately £2,600 per annum; net profit to owner-proprietor £650/£700; low rental; long lease; price £2,250 all-at, or near offer.

(C3) LONDON, S.W.—Established working-class business for disposal owing to retirement; turnover approximately £2,000 per annum; gross profit about 43 per cent.; large panel (over 1,000 scripts per month); premises situated in busy thoroughfare; reasonable purchase price.

(C4) RAYNES PARK.—Excellent profit-earning cash business with definite opportunities for further development; turnover approximately £2,300 per annum; net profit upwards of £600; reasonable rental including living accommodation; price by negotiation.

(C5) BOURNEMOUTH.—Excellent opportunity for enterprising chemist to acquire an attractive and well-positioned pharmacy with particularly good potentialities under personal proprietorship; present returns approximately £1,150 per annum; reasonable rental including modern living accommodation; price all-at for quick sale, £650, representing considerably less than the value of stock and fixtures; early enquiry strongly advised.

(C6) BRISTOL.—Increasing up-to-date pharmacy, with good future potentialities; present returns approximately £1,100 per annum; rent £90; long lease; price to comprise approximate value of stock and fixtures only.

(C7) ROMFORD (NEAR).—Genuine middle-class business for disposal owing to retirement, at very reasonable figure; turnover for last financial year upwards of £1,800; vendor owns property, and will grant a long lease at a very moderate rental; living accommodation; definite scope for further substantial increase; £200 only is asked for goodwill, plus the value of stock and fixtures.

(C8) DEVON.—Old-established pharmacy, occupying leading position in main thoroughfare; has not been fully exploited during the past few years, but is well capable of an early annual turnover of £3,000/£3,500; present returns approximately £1,800; spacious living accommodation with bathroom, etc.; price by negotiation.

(C9) FINCHLEY (NEAR).—Owing to contemplated retirement an established main road pharmacy with spacious house above, is available for purchase at a reasonable figure. Present returns approximately £1,750 per annum, with abundant scope for substantial increase; good stock and excellent fixtures; splendid opportunity for chemist with enterprise.

(C10) LONDON, S.E.—Exceptionally good profit-earning business situated in thickly populated district; turnover for 1934 financial year, £2,115; net profit approximately £500; certified accounts; reasonable overheads; house available if required (at present sub-let); price all-at £1,175.

(C11) CORNWALL.—Good middle-class business with small optical connection; increasing turnover; receipts for last financial year £2,356; net profit about £500; reasonable rental; flat above at present sub-let; price £1,650, or near offer, including stock and fixtures, estimated at £1,150.

(C12) SUSSEX.—Attractive country business, with no opposition, situated amid beautiful surroundings near to sea; returns approximately £1,250 per annum; net profit about £350; freehold also available, upon which a substantial mortgage could be arranged; price of business £750; property £975, being considerably less than cost.

(C13) BRADFORD.—Progressive up-to-date pharmacy with moderate living accommodation, at present sub-let; increasing turnover; net profit for last financial year, £322; low rental; excellent prospects; price £700, including stock £300.

(C14) NORWOOD.—Attractive modern pharmacy occupying prominent position in busy shopping street; old-established, but neglected for a long period; is now showing good progress and is capable of substantial increase; present returns £1,250/£1,300 per annum; net profit to owner-proprietor upwards of £300; reasonable purchase price; early enquiry strongly advised.

(C15) ESSEX.—Progressive up-to-date pharmacy with six-roomed flat above; turnover for last financial year £2,529; net profit to owner-proprietor approximately £600; large N.H.I., and good private dispensing connection; reasonable rental; price asked £1,775 including stock and fixtures estimated at £1,075; offers considered.

(C16) CARSHALTON (NEAR).—Good profit-earning business with scope for further increase; turnover for last financial year, £1,456; gross profit £543; net profit about £385; living accommodation, with garden; low rental; genuine reason for selling; further details upon application.

(C17) WESTCLIFF.—Attractive modern pharmacy with up-to-date flat; steadily increasing turnover; returns for 1934–35, £1,363; gross profit £471; net profit £335; accountants' figures available; good reason for disposing; price £800 or near offer.

Valuations for transfer, probate, income tax, etc., promptly executed at economical rates.

BERDOE & FISH

CHEMISTS' VALUERS AND TRANSFER AGENTS,

41 Argyle Square, KING'S CROSS, W.C.1

(One minute from St. Pancras and King's Cross Stations.)

1.—ESSEX (Popular Seaside Resort).—Good Middle-class Business; in very best position; returns over £2,600 at good profits; scope for increase; attractive corner pharmacy; fully stocked; price £1,600 or near offer.

2.—SURREY (20 miles out).—Old-established Business; main road; good residential town; present returns about £1,350; was doing over £1,700; scope in younger hands; books audited; own property; long lease granted; price £1,100 or near offer.

3.—TUNBRIDGE WELLS (near).—Unopposed Business; in rapidly growing district; returns £1,034; net profit £233; rent £50; stock and fixtures worth £370; price £475 or offer.

4.—SOUTH COAST.—Good-class Business, pleasantly situated on sea front; returns average £20 weekly; no near opposition; nice house and garden; long lease; price £50 plus valuation, in all about £400.

5.—HARROW.—Well-established Good-class Business, under management; returns £35 weekly, scope for increase; large house and shop; beautifully fitted; price for quick sale £250, plus stock at valuation, in all about £650.

6.—LONDON, S.E.—Old-established Business with P.O. attached; returns £1,250, increasing, plus £250 from P.O.; net profit over £450; attractive shop, with good house; low rent; valuable lease; price £1,250.

7.—NORTH LONDON.—Sound Middle-class Business, with excellent Panel; returns last year £1,480; neglected, was doing £1,850; owner retiring; well-equipped pharmacy; good position; stock worth £600; price £1,250 or offer; personally recommended.

8.—EARL'S COURT.—Good-class Retail and Dispensing Business; turnover exceeds £1,750; net profit £427; well-fitted pharmacy; good position; low rent; long lease; offers invited.

9.—WIMBLEDON.—Light Cash Retail, in good position; returns about £1,100, increasing; audited books; good house and garden; stock and fixtures worth over £400; price £650 or offer.

10.—LONDON, E. (Death Vacancy).—Sound Profitable Business, under management and steadily increasing; returns £1,379, including £240 N.H.I.; net profit £344; modern fitted shop; good stock; price, with freehold property, £1,725 or offer; £700 mortgage transferable; strongly recommended.

11.—LONDON, S.W.—Well-established Light Suburban Business; under elderly manager; returns about £19 weekly; plenty of scope; good living accommodation; new; 14 years' lease; stock worth £277; price £450 or close offer.

Estab. 1870. Telephone: Terminus 3574.

THE ASSOCIATION OF MANUFACTURING CHEMISTS, LIMITED

(Business Agency, Transfer & Valuation Department)

KIMBERLEY HOUSE, Holborn Viaduct, LONDON, E.C.1 *and at* EXCHANGE CHAMBERS, 2 Bixteth St., LIVERPOOL.

PARKIN S. BOOTH, Valuer. *Tels.: CITY* 3691 (4 lines).

VALUATIONS. SALES OF BUSINESSES. STOCKTAKINGS.

Enquiries Invited.

S. F. CLARK, F.N.A.A.

'Phone: Prospect 3366

CHEMISTS' VALUER & TRANSFER AGENT

34 Marksbury Avenue, Richmond, Surrey

I have a number of attractive businesses for *exclusive* disposal, both in London districts and the country. Purchasers are courteously invited to let me have, *in confidence*, details of their actual requirements.

Valuations for all purposes personally conducted.

TO GET

INTO DIRECT TOUCH

with the best buyers of Drugs, Chemicals, and allied products

ALL OVER THE WORLD

use regularly the publicity service afforded by

THE CHEMIST & DRUGGIST

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less ; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

BATTERSEA.—Lock-up Shop, suitable owner-manager, middle- and working-class trade; scope for increasing; N.H.I. average 350 monthly last 12 months; net profit £320 average last 4 years; accountant's figures available; new lease will be granted; owner leaving retail pharmacy; price £525 or near offer; can be taken over as soon as required. Apply 186/38, Office of this Paper.

LONDON.—For immediate disposal, well-established Middle-class Business; turnover shows steady increase, now averaging nearly £1,200 p.a.; unopposed; genuine reason for selling; long lease; moderate rent; good house and garden, side entrance; any investigation; a reasonable offer will be accepted. 186/27, Office of this Paper.

LONDON, S.E. (nice district).—Old-established Business; sound, steady trade; accountant's figures available; no N.H.I., but scope, being nearest to local doctors; double-fronted shop; private entrance; excellent accommodation; garden, with rear entrance; low rent and rates; lease; absolutely genuine and worth serious investigation; price £500, inclusive of stock. P.C.B. 169/20, Office of this Paper.

MANCHESTER (near).—Small lock-up Branch Shop for immediate disposal, situated main road near busy railway station and bus terminus; growing district; no opposition; good reason for disposal; will accept stock and fixtures at valuation, approx. £200; low overhead charges; rent 17s. 6d. per week inclusive. 186/34, Office of this Paper.

NORTH-EAST COAST (Popular Health Resort).—Two Businesses for Sale; turnover £3,000 per annum; this is a genuine offer; chartered accountants' figures are available for the last 10 years; Kodak and Selo Agencies at both shops; sound reason for disposal; only genuine enquiries entertained; no agents. Apply 186/30, Office of this Paper.

SOUTHEND-ON-SEA.—Chemist's; Double-fronted Shop, with good living accommodation; low rent; well stocked; trade £20 per week; price £350, all at. Station Estate Office, Prittlewell, Essex.

FOR Immediate Disposal, sound Business near London; stock £500, fixtures £250, £1,000 all in; long lease at reasonable rental; modern living accommodation; good N.H.I.; takings average £28 weekly, with good profits; plenty of scope and opening for Optics. Apply 186/35, Office of this Paper.

FREEHOLD Modern Drug Stores with good accommodation; no opposition; in pleasant surroundings; 30 miles London; Kodak Agency held; need Qualified man; good living assured. 184/1, Office of this Paper.

MANUFACTURING and Wholesale Chemists' Business for Disposal; steady turnover and profits; enquiries invited from principals only. 172/23, Office of this Paper.

OLD-ESTABLISHED West End High-class Dispensing and Retail Business for immediate disposal; large private Dispensing connection; over 3,000 private prescriptions yearly; good Retail and Photographic trade; long lease at reasonable rental; turnover £2,000 p.a.; high gross profit; stock and fixtures £850; goodwill by arrangement. 185/21, Office of this Paper.

STOCK and Fixtures at Valuation only, or reasonable offer for London Main-road Business; has been run as a branch; scope for great increase with personal attention. Apply Carter, Chemist, Barons Court, W.6, or 'phone Riv. 6330.

10 MILES from London.—Neglected Branch Business; only needs personal supervision; turnover 1932 £1,324, 1933 £1,320, 1934 £1,145; rent £75, sublet £50; price £200, s.a.v. 181/9, Office of this Paper.

PREMISES TO LET.

SPLENDID opening for Chemist offers in growing village in Sussex, House and Shop, modern; £75 p.a.; no ingoing. Burnett, Crofton House, Forest Row.

TO LET.—London Road, Mitcham. Excellent Shops with new modern fronts and good living accommodation; rent £150 on lease, or lock-up shops £60 p.a.; thickly populated neighbourhood; exceptional opportunity for Chemist. Lansdowne, 17 Lansdowne Road, S.W.8.

BUSINESSES WANTED.

PHARMACIST, single, capital £1,500, desires a position in a good-class business with view to partnership or early succession; he might consider buying a suitable business outright. 187/12, Office of this Paper.

AGENCIES.

COMPANY with exceptionally good connection and experience in marketing Proprietaries open to handle another Agency on Co-operative Sales Plan offering coverage of all Chemists and Stores. P.C.B. 169/19, Office of this Paper.

SALES Agents, covering London, South and West of England, open to take over Selling of Advertised Proprietary; London office and excellent connection available. P.C.B. 169/190, Office of this Paper.

APPRENTICES.

LONDON, W.—A well-educated Youth as an Apprentice in good-class Dispensing business; three assistants kept. 187/401, Office of this Paper.

SITUATIONS OPEN.

RETAIL (HOME).

6s. for 40 words or less ; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

BRIGHTON.—Qualified Lady required; very light N.H.I. Dispensing and Counter. Please apply, stating salary required and usual particulars, to 187/29, Office of this Paper.

CHANNEL Islands.—Smart Qualified Manager for Medium-class business which has been neglected; experienced Counter and Window-dressing; capable of control; state age, experience and salary required. 186/19, Office of this Paper.

CITY.—Qualified Assistant; permanency; no holiday or Sunday duties; 5 ft. 6 ins.; must be young and quick. Apply personally between 10.30 a.m. and 12 noon or 2.30 to 4 p.m., Percy E. Underwood, 25 Walbrook, E.C.4.

GRAVESEND.—Qualified Lady Assistant required. Applications, stating age, experience and wages required, together with copies of recent testimonials, to be forwarded to the Managing Secretary, Gravesend Co-operative Society, Ltd., 3 Harmer Street, Gravesend.

LLANDUDNO.—Unqualified Lady Assistant (25-30) wanted at once for Dispensing, Counter and Photographic Sales; must be of good appearance and height; fullest particulars in first application. Miss Horniblow, M.P.S., 4 Queen's Buildings, Llandudno.

LONDON.—Opportunity occurs for Young Qualified Man in a new branch; commencing salary £4 5s., with commission; position offers unusual scope for first-rate Window-dresser and Display Man. Write, with full details of experience, Pomeroy, 76 Brick Lane, E.1.

LONDON.—Qualified Male Assistant (23-30) for August 6; permanency; Counter and Dispensing. Write, stating full particulars of experience, age, salary required, to Jones & Co., Chemists, 161 New Cross Road, London, S.E.14.

LONDON (near).—Wanted, a Junior Assistant (male) for a good-class Family and Dispensing business. Apply, stating full particulars, age, height, experience, salary required and when disengaged, to 187/17, Office of this Paper.

LONDON, N.W. (Neasden).—Young Lady Assistant wanted, Unqualified, with good experience in Dispensing Counter Trade and Window-dressing. Give full particulars of experience in first instance, with age and salary required, to Mr. Edgar Davies, 356 Neasden Lane, Neasden, N.W.10.

LONDON, N.W.10.—Wanted, Qualified Manager for branch shop, with good general experience; age 25 to 28. Give full particulars in first instance of experience, age, salary asked to Mr. Edgar Davies, 59 Dudden Hill Lane, Willesden, N.W.10.

LONDON, S.W.—Male Assistant (25-30), to execute Post Orders; Unqualified; hours approximately 8.30 a.m. to 6 p.m., Saturdays 1 p.m. Write, with full particulars, stating salary required, Box 456, Sells Ltd., 14 Lancaster Place, Strand, W.C.2.

LONDON, W.—Young Qualified Assistant (Male) required for July 22nd; good appearance and height; excellent opportunity for gaining first-class West End experience. Write full particulars salary, references, height, etc., to G. H. Pierson, 94 Queen's Road, Bayswater, W.2.

LONDON, W.2.—Wanted at once, a Qualified Male Assistant (about 24 years); accustomed to high-class Dispensing. 187/4, Office of this Paper.

MANCHESTER.—Qualified Young Gent or Lady required for branch as Assistant. Reply, stating age, wages required, enclosing photograph (if possible) and when free, to 263/519, Office of this Paper.

MANCHESTER.—Young Qualified Assistant required immediately; N.H.I., Counter, Window-dressing; permanency; working-class district. State salary, age, etc., to Tomlinson (Manchester), Ltd., 21 and 23 Embden Street, C-on-M., Manchester, 15.

MIDLANDS.—Smart Qualified Male Assistant (age 35-40); quick N.H.I. Dispenser and good Counterhand; enclose photo and state salary required; highest references; permanency to right man. Apply 185/16, Office of this Paper.

TORQUAY.—Qualified Manager (married) required for Branch Business; please state full details and salary required, and if convenient give 'phone number for call after 8 p.m.; applicants not answered in 5 days respectfully declined. Apply E. Quant, Landour, Torquay.

WARWICK.—Immediately, Qualified Assistant, locum or for six months; for a good-class Dispensing busines; also Photographic and Agriculture; with a view to take an interest in same. Mellor & Co. (Warwick), Ltd., Chemists.

WARWICKSHIRE.—Required shortly, capable Assistant (23-35); Qualified or Unqualified; accustomed large and busy pharmacy; practical Photographic knowledge advantage; good experience Dispensing and Manufacturing. Send age, salary, height, photograph (returnable), whether married, when disengaged, copies references, L. N. Lester, Rexall Pharmacy, Nuneaton.

WEST STANLEY CO-OPERATIVE SOCIETY, LIMITED, invite applications for a Lady Assistant, Qualified, single, for the Chemistry Department. Applications to be made on special form, which will be sent on receipt of stamped and addressed envelope to the Secretary, Front Street, Stanley, Co. Durham. The last date for receiving applications will be July 13th, 1935.

A.A.A.—QUALIFIED Man required for North London, possessing good general experience; Counter, Dispensing and Window-dressing; one able to manage single-handed if necessary. Write, giving full particulars, to "Chemist," 166 Hertford Road, Waltham Cross, Middlesex.

A QUALIFIED Manager required immediately; salary and commission; progressive South Wales business; preference applicants with Optics; enclose photograph. 184/5, Office of this Paper.

ASSISTANT; capable of taking charge; medium-class; Dispensing and Photographic. Revill, Chemist, 193 Kettering Road, Northampton.

AT ONCE.—Junior Assistant wanted for season. Please send full particulars, with photo if possible, to W. Hill, Chemist, Westgate-on-Sea, Kent.

BRANCH Manager wanted at once; permanency; flat available; high salary with commission to man with personality; fullest particulars in first letter, photo, when disengaged. Hudson, 12 Allenby Parade, Waxlow Manor Estate, Southall. Tel.: 1725.

CHEMIST-OPTICIAN required (J.C.Q.O. preferred) for Derbyshire branch. Apply in first instance, giving salary required, when free, qualifications and references, to G. M. Woodlands Chemists Ltd., 34/40 Ludgate Hill, E.C.4.

EXPERIENCED Qualified Assistant; quick and smart Counter Man; Photographic knowledge essential; good at Window-dressing and Display; state age, experience, references and salary required. Symonds, Chemist, Ipswich.

FOR GOOD-CLASS FAMILY BUSINESS.—Young Qualified for two months (possible permanency) from July 15. Also Unqualified Assistant, male, permanency; for working-class business; elderly, part time, Qualified; all London. State full particulars and salary expected to 186/48, Office of this Paper.

JUNIOR Assistant required; experienced in Counter, Window-dressing and Dispensing; give full particulars as to experience, salary required and when at liberty. Price, Chemist, Ashford, Middlesex.

JUNIOR Assistant (about 20) required for a busy good-class pharmacy; must be a quick, accurate Dispenser, neat writer, willing, pleasant worker, and of good appearance; kindly state age, height, wage required, experience, when at liberty, and give two references; all applications must be in writing. Peebles-Chemists, 2 High Street, Dorking.

JUNIOR Assistant wanted, Unqualified, male or female; able to Dispense and assist at Counter; from July 15-27. Reply, stating salary required, with reference, to Thomas, 150 Merton Hall Road, Wimbledon, S.W.19.

LADY AND GENTLEMAN required for about 7 weeks; both must be well up in selling Photographic Goods and quick Counter trade; would suit anyone attending college next term. Write, with full particulars wages required. Hudsons, Chemists, Skegness.

LADY Assistant; Counter; state experience and wages required. Herbert's Drug Stores, 207/209 Vauxhall Bridge Road, London, S.W.1.

LADY Assistant, quick and accurate Dispenser, capable Saleswoman, wanted soon for good middle-class pharmacy in Beckenham. Write, stating age, experience and salary (which must be moderate), to 187/32, Office of this Paper.

LADY Assistant required immediately, temporarily; sickness vacancy; Counter and Photographic Sales experience necessary. Send full particulars and salary asked to Miss Hutcheon, W. A. Brearey & Son, 10 Prospect Hill, Douglas, Isle of Man.

LADY M.P.S. required; permanency to suitable person; age immaterial; easy berth; call or write, stating experience and salary required. I. Douglas, 73 Upper Street, Islington, N.1.

LEWIS & BURROWS have a vacancy for a young Qualified Assistant (male). Apply, giving full particulars of previous experience and stating salary required, 146 Holborn Bars, E.C.1.

LOCUM, Lady or Gentleman, Qualified; light duties; suit elderly person; August 24 to September 7, inclusive. Reply, stating age, salary required, with references, Chemist, 1 Church Street, Kidderminster.

LOCUM, Male, July 22nd for 3 weeks; small Family Business in S.W. London suburb. Please send full particulars as to salary, age, etc., in first letter, 186/46, Office of this Paper.

LOCUM, Qualified, for six weeks commencing July 22nd, in South London; interview essential. State age, experience and terms to 186/6, Office of this Paper.

LOCUM, Qualified, lady or gentleman, August 19th to 31st, inclusive. Also Young Unqualified Assistant, July 22nd to August 3rd, inclusive. Replies to state age, salary required, and references to Taylor, Chemist, White Lion Square, Ilkeston.

LOCUM, Qualified, required for 2 weeks commencing August 12th; light duties. Apply, giving full particulars and salary required, to Iliffe & Sons, Market Place, Nuneaton.

LOCUM, Unqualified, male, good Dispenser, wanted 2 weeks from July 22nd; salary £3 per week. Marshall Ltd., 91 West Green Road, N.15.

LOCUM, Unqualified, required from August 19 to October 2. Full particulars to E. Litchfield, Farnborough, Hants.

QUALIFIED, active Young Man wanted for quick Retail Counter and Dispensing, Photographic. J. & E. Freeman, Ltd., Chemists, Icknield Street, Birmingham.

QUALIFIED and Unqualified Assistant required, also Holiday Reliefs. Call, Bird & Storey, 1 Marble Arch, after 11 o'clock.

PHOTOGRAPHS, TESTIMONIALS, &c.

When answering advertisements in this section applicants are strongly advised not to send (unless specially requested) ORIGINAL TESTIMONIALS or VALUABLE PHOTOGRAPHS. As can be readily understood, when an advertiser receives from 100 to 150 replies the task of returning photographs, testimonials, &c., is one of some difficulty.

QUALIFIED Assistant, able to take charge, required August or September; young; married or single; house if required; must have good experience in high-class Family Dispensing business; permanency; state salary and usual particulars. Apply, in writing, "Chemist," Driftbridge Parade, Ewell.

QUALIFIED Assistant for middle-class business; good Window-dresser and knowledge of Photography; London, S.W., district. Apply, giving full particulars of experience and mention salary required, 187/22, Office of this Paper.

QUALIFIED Assistant, lady or gentleman, wanted at once; near Leeds. Please apply, stating full particulars, age and salary expected, to 187/31, Office of this Paper.

QUALIFIED Assistant required for July 8 to 20 inclusive. 'Phone High Wycombe 111 or write Bristow, 17 Oxford Street, High Wycombe.

QUALIFIED Assistant wanted for London, W.5, branch; good references essential; Dispensing, Counter and Photographic (not over 30 years of age). Apply, giving full particulars of previous experience and salary expected, to 187/20, Office of this Paper.

QUALIFIED Assistant wanted immediately for permanent position in Light Retail and Dispensing Business in S.E. London; comfortable berth; lady preferred. State age, experience and salary required to 187/16, Office of this Paper.

QUALIFIED Lady or Gentleman to manage village Pharmacy, 43 miles from London; assistant employed; immediate vacancy for July 8; light post; please state age, height, references, experience, salary indoors or outdoors in first letter. Eacott, Teynham, Kent.

QUALIFIED Lady required for Counter and Dispensing; market town 25 miles from London; state experience, salary, etc. Richards & Bowring, Ltd., The Pharmacy, Wickford, Essex.

QUALIFIED Locum required for 2 weeks commencing August 26, 1935, for S.E.9 district. H. N. Dickinson, Ltd., 96 Westmount Road, S.E.9. State age and salary required.

QUALIFIED Locum required, July 19th till 27th, inclusive; state salary required, references. Robertson, Chemist, Cheddar, Somerset.

QUALIFIED Manager for country branch near Orpington; middle-aged not objected to; permanency. Please state age and salary required to Preston-Jackson, 64 High Street, St. Mary Cray, Kent.

QUALIFIED Manager, with Optical experience, for small provincial branch; energetic, obliging and trustworthy. Particulars to 185/17, Office of this Paper.

QUALIFIED Manager (25-30), energetic and reliable; capable of taking sole charge. Full particulars of age, experience and salary required, Hadfield, 386 Prince Regents Lane, E.16.

QUALIFIED; to manage small branch, London, E.15; good Window-dresser and Salesman and one with initiative. Please send particulars, including salary expected, to 186/3, Office of this Paper. Also, Locum wanted for two months. References, particulars, stating salary to above.

REQUIRED immediately, Qualified Assistant, male; preference given to man with high-class London or Suburban experience; this is a good opportunity for a man requiring permanency with prospects. Apply, by letter, Neville Booth, 44 Cannon Hill, Old Southgate, N.14.

TEMPORARY Assistant, August 6-17; Unqualified; state age, salary required, etc. Piper, The Wolsey Pharmacy, St. Nicholas Street, Ipswich.

TEMPORARY, Unqualified Junior Assistant, young, male, wanted immediately. Apply H. C. Neve, 1416 London Road, Norbury, S.W.16.

UNQUALIFIED Assistant (either sex) for high-class Dispensing, Toilet and Perfumery business; good private Dispensing experience essential; good starting wage; progressive position, but essentially hard worker and one interested in his business and in advancing his sales ability. State record of experience, with copy references and recent photo. Apply in handwriting or by personal interview, Sunday, 10 a.m. to 1 p.m., or 3 p.m. to 4.30 p.m. (or by arrangement; 'phone Arnold 1514), to A. E. Miles, 12A Court Parade, North Wembley.

UNQUALIFIED Assistant, lady or gentleman (about 21), required at once; must have thorough knowledge of Retail and Dispensing; write or call Sunday between 10 and 8. "Chemist," 59 Hillside, Stonebridge Park, N.W.10.

UNQUALIFIED Assistant (male) for two weeks, July 22 to August 3; call or write, Morrell & Dixon, 7 Central Parade, Wembley, Middlesex.

UNQUALIFIED Assistant required immediately for Counter and N.H.I.; must be quick, accurate Dispenser; one seeking permanency preferred. Apply, giving full particulars of experience, together with copies of testimonials, Tate, Francis & Co., Ltd., 37 Roman Road, E.3.

UNQUALIFIED, used charge Drug Store; lady or gentleman; moderate salary. Particulars, with salary required, "P. J. F.," 15 Station Road, Sidcup, Kent.

WANTED at once, Qualified Dispenser, good at Counter; middle-aged preferred; state full particulars of experience and references and salary required. 185/12, Office of this Paper.

WANTED IMMEDIATELY.—Young Qualified Assistant (male) for East London Pharmacy; must be quick, accurate Dispenser. Apply, stating age, experience, salary required and earliest date free; photo if possible, which will be returned. 187/23, Office of this Paper.

WANTED immediately, young Unqualified Assistant, used to N.H.I.; good Counterman and Window-dresser. Full particulars and salary required to S. Paddon, 657 Attercliffe Road, Sheffield.

WANTED.—Qualified Optician (male) with experience in Pharmacy. Applications, giving particulars of experience, age, salary required and copies of testimonials, to be in by first post on Tuesday, July 16, to General Secretary, Scunthorpe Co-operative Society, Ltd., 180 High Street, Scunthorpe, Lincolnshire, envelopes endorsed "Optician."

WANTED, Smart Assistant (junior position), with good experience in Dispensing, Window-dressing, etc. Apply L. H. Knight, 3 The Exchange, Purley, Surrey. Applications considered will be replied to within three days.

WANTED.—Young Qualified Male Assistant. Apply, with full particulars in first letter *re* experience, age, salary required, etc., to the Secretary, Colne and District Co-operative Society, Ltd., Colne Hall, Colne, Lancs.

YOUNG Qualified Lady Assistant wanted for second week in August; permanency; good-class business in residential area; must be smart Counter hand and have Photographic knowledge; small N.H.I.; good post for right person. Hobson, Chemist, Millhouses, Sheffield.

YOUNG, Unqualified Assistant (male) required for 14 days from July 15th. P. Stacey & Son, 81 High Street, Teddington, Middlesex.

YOUNG, Unqualified Assistant required; capable, pleasant; good knowledge Counter, Photographic Sales, Window-dressing, Counter Display, etc.; season or permanency; no Dispensing necessary; Lady preferred; state age, height, salary required, experience, etc. J. N. Last, Chemist and Optician, Station Approach, Lancing, Sussex.

WHOLESALE.

LONDON Cosmetic Manufacturers require immediately energetic Representative, with good connections, to call on Wholesalers and/or Retailers, on commission basis. Apply 186/42, Office of this Paper.

LONDON Manufacturing Chemists require immediately Qualified Chemist, temporary, two months; experience of keeping Dangerous Drugs records desirable; suitable for Chemist recently Qualified; state age, qualifications, salary required. 263/509, Office of this Paper.

NORTHUMBERLAND AND DURHAM COUNTIES ONLY.—Experienced Traveller, with good sound connection, calling upon Co-operative Stores, Grocers and General Dealers; wanted to sell the usual Drysalters' Goods and Specialities. Apply, in full confidence, 171/7, Office of this Paper.

JOHN RICHARDSON & CO., Leicester, Ltd., require a Junior Traveller for local representation; applicants will please give full particulars.

MEDICAL Representatives required for (1) London, North of Thames and surrounding counties; (2) London, South of Thames and surrounding counties; (3) Northumberland, Durham, Westmorland and Cumberland; (4) Lancashire and Cheshire, by old-established Manufacturing House; applicants must give fullest particulars of experience, if any, territory covered and age; car essential. 263/517, Office of this Paper.

OLD-ESTABLISHED French Perfumers require Whole-time Representatives with good connection Chemists and Hairdressers, Midlands and Northern Counties; age not exceeding 35; car essential; salary, commission and generous travelling expenses; fine prospects steady, hard workers. Write fully experience, qualifications, minimum salary required, 263/520, Office of this Paper.

PACKERS of well-known Speciality Medicines, desirous of placing their products in Colonies and other countries, require the services of a Gentleman who has experience of similar goods and of conditions and markets abroad; good position to the right man. Send full particulars of past experience to 186/200, Office of this Paper.

REPRESENTATIVE wanted by London Wholesale Druggist to call on Medical men in London district. Apply, giving connection, experience, etc., to 262/496, Office of this Paper.

REPRESENTATIVES calling at Stores who wish to carry a Sixpenny Sideline, non-competitive, send particulars to 186/4, Office of this Paper.

SALES Manager required by firm marketing Packed Specialities, Medical and Toilet, sold by Grocers and Chemists, in most parts of the British Isles. Applicants must have good connection with best buyers and have sound selling schemes. The successful candidate will first be required to prove his selling abilities as an ordinary representative, and payment will be made either on salary or on a results basis. 186/20, Office of this Paper.

WANTED.—Representative for well-known Soap and Toilet House on the Midlands Area (Birmingham, Leicester, Northants, Hunts), etc., to call upon Chemists, Hairdressers, Grocers, etc.; salary and commission; car provided; must know the area thoroughly and have sound and good connections. Apply, in strict confidence, to 263/518, Office of this Paper.

WELL-KNOWN Firm handling widely-advertised products require first-class Representatives, on good commission basis, for the following territories: North and South Wales, Northumberland, Durham, North and East Riding Yorkshire; only those with first-class connections among Chemists and Druggists need apply; splendid opportunity for right men. Write 263/516, Office of this Paper.

COLONIAL, INDIAN AND FOREIGN.

KENYA COLONY.—Qualified Male Assistant required by leading English Chemists; good-class experience and knowledge of Photography essential; Optical qualification desirable; age under 30, single and of good appearance; 4 years' agreement; first-class passage paid out and home; commencing salary £30 per month, second six months £32 10s., second and third years £35, fourth year £37 10s. per month respectively. Apply, with full particulars of previous experience, photograph and copies of references, to "Zebra," 84 Fenchurch Street, E.C.3.

CHEMIST for the East.—Qualified Assistant, gentlemanly appearance and address; good Salesman and Dispenser (age 22-24); single; four years' agreement; passage paid out and home. Write, stating full particulars, with photo if possible and copies of testimonials, to Box X. 406, Willings, 133 Moorgate, London, E.C.2.

SITUATIONS WANTED.

RETAIL (HOME).

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

A.A.A.A.—MANAGER; 18 years' experience all branches, Salesmanship and Window-dressing, desires permanency, with living accommodation preferred. 187/5, Office of this Paper.

A.A.—ASSISTANT (22) desires situation; locum or permanency; excellent West End experience Dispensing, Counter, Photographic, etc.; West End preferred, not essential; disengaged. "K.," 47 Aldbourne Road, W.12.

ACTIVE, elderly Pharmacist; Dispensing, Superintending; light duties; moderate terms; North London preferred. 15 Tolmers Road, Cuffley, Herts.

AN Experienced Assistant, Dispenser; accustomed to good-class Retail business; well recommended; London area preferred; tall, single; permanency. 179/7, Office of this Paper.

AN Experienced Qualified man (27) seeks change; intelligent, widely read, well educated; good personality; accustomed to management. 186/41, Office of this Paper.

AS Locum; Qualified; free July 8; first-class experience. Chemist, 66 St. Ann's Hill, Wandsworth.

ASSISTANT, Unqualified (29), 10 years' Retail, Dispensing, etc., desires post; country no objection, but London preferred; highly recommended; salary £3. Forde, 22 Albert Street, Regent's Park, N.W.1.

ASSISTANT, West End experience, disengaged June 29; Counter and Dispensing; good reference; locum or permanency. Write to M. G. Birch, 4 Melrose Gardens, Shepherds Bush, W.6.

ASSISTANT (24, tall), awaiting Part 2 result; good Dispensing and Photographic experience; free July 15-August 3. Longley, 2 Linley Crescent, Romford.

BIRMINGHAM or Midlands preferred, but not essential; thoroughly experienced; well recommended; locum work undertaken. Hanley, c/o 180 Lozells Road, Birmingham.

BRANCH Manager, London only; capable and experienced in all duties; good references. 187/9, Office of this Paper.

CAPABLE Unqualified man desires locum work; accustomed good-class; reliable Dispenser, Counter, Photographic. S. P. Jay, 366 Brixton Road, S.W.9.

DISPENSER, male (32), seeks post with Doctor or Institution; Book-keeping and Accounts; 14 years' experience; College trained. 187/8, Office of this Paper.

EXPERIENCED Qualified locum or relief; £4 10s. to £5 5s.; free from August 26. Harris, 92 St. Mary's Road, Oxford.

LADY Dispenser-Bookkeeper (22), Hall Qualification, desires post with Doctor or Chemist; London or South preferred. Miss Rider, Upways, Guildford Road, Chertsey, Surrey.

LOCUM, M.P.S., F.B.O.A. (40); thoroughly reliable; disengaged from July 8; Midlands. 187/14, Office of this Paper.

LOCUM, Qualified; highest references; experienced; July 15 to August 16; Chemist or Institution. Jenkins, 4 St. John's Road, Taunton.

LOCUM, Unqualified, all-round experience; disengaged August 6. "Radix," 72 Tremadoc Road, Clapham, S.W.4.

LOCUM; vacant dates July 29 to August 10, August 26 to September 14. "Chemicus," 56 Rudloe Road, Balham, S.W.12.

MANAGER, M.P.S., disengaged, seeks permanency; locum work entertained; good general all-round experience; South Coast or London preferred. Smith, Warmdene House, Carden Avenue, Brighton, 6.

M.P.S.—LOCUM for London area; experienced and adaptable; Optics, Photography, Dispensing. M., c/o Eclectic Press Service, 9 Sandland Street, W.C.1.

M.P.S. SEEKS situation; 15 years' good Veterinary experience, Packing and Marketing, Retail; introduce fresh lines; moderate salary for progressive post. 188/1, Office of this Paper.

QUALIFIED Chemist (43) desires position as Branch Manager, Birmingham district; new branch preferred; moderate salary, with commission and house accommodation. 185/13, Office of this Paper.

NAMES AND ADDRESSES.

When sending advertisements for any of the sections in this Supplement, advertisers—as a guarantee of good faith and not necessarily for publication—should always give their names and addresses. It sometimes occurs that this rule is not followed and delay and disappointment ensue. Strict attention to this detail will be appreciated.

CLEAR OUT—your Old or Damaged Stock of Photo Goods.
Why keep them any longer? Turn them into CASH.
I GIVE BEST PRICES for Old Films (damaged, fogged or expired dates); Packet Papers. Cards (any sizes). Old Photo Goods or Cameras. Bromide Papers. Plates (all sizes, all makes). Send any goods in the photo line. I buy all, good or bad. Cash per return. A good price for all Cameras. Send them along.
S. E. HACKETT, 23 July Road, Liverpool

QUALIFIED (28), single, at present managing, desires change; varied experience in both London and Provinces; West of England preferred; can be free for August 19. 186/18, Office of this Paper.

STUDENT-DISPENSER (Lady) desires temporary work as locum; August-September; London, South, preferred; Shorthand-typist; neat handwriting. 186/7, Office of this Paper.

STUDENT (Ph.C. final year), 4 years' business experience with Provincial Wholesale and Retail firm, requires Holiday Locum July 14-September 31; London preferred; long hours no obstacle. 183/7, Office of this Paper.

UNQUALIFIED Assistant (21), 5 years' experience, seeks change, locum or permanent; good Salesman, courteous Counterhand, clean, accurate Dispenser; disengaged any time; salary 55s.; good references. 185/4, Office of this Paper.

UNQUALIFIED (27) desires change; wide experience West End, seaside; permanency; salary £3 10s.; free August 3; excellent references. 186/8, Office of this Paper.

UNQUALIFIED (24) desires post; capable Dispenser; disengaged August; excellent references. Roberts, 58 Rochester Avenue, Bromley, Kent.

WHOLESALE.

ALIVE Representative, 16 years' experience, whole of London, Chemists, Hairdressers and Stores, open to consider really well-known reputable house; actual records of ability and salesmanship; exceptional credentials; own car. 179/15, Office of this Paper.

ADVERTISER offers advantages 18 years' combined Wholesale and Retail experience to Wholesale House; quick settler; adaptable; competent take charge; excellent references. 186/51, Office of this Paper.

EXPERIENCED Representative, many years personally connected London Chemists, Hairdressers, Stores, desires appointment; highest references; salary basis only; disengaged. P.C.B. 169/9, Office of this Paper.

REPRESENTATIVE, South London, seeks additional established line; expenses and commission or whole-time salary and expenses on Eastern Counties; strong connection Chemists, etc., "N. I.," 69 Friern Road, London, S.E.22.

REPRESENTATIVE, with 20 years' connection S.W. London and County, will be making change end of August, offers services to progressive firm wishing to build up London trade. 184/9, Office of this Paper.

TABLET and Pill Coater, with knowledge of Compressing, seeks situation; 20 years' experience. G. H. T., 58 Curzon Road, Ealing, W.5.

COLONIAL, INDIAN AND FOREIGN

IN EGYPT.—Professional Medical Propagandist seeks Important Firm Medical Specialities to engage him for distribution of its products; best connection with Doctors in Egypt, Cyprus and Sudan; large experience; actually employed important firm. Write "Propagandist," Box 418, Cairo.

M.P.S., F.B.O.A.—MANAGER, last 4 years large pharmacy Tropical Africa desires situation abroad; thoroughly conversant all branches, including Clearing and Forwarding, Indenting, Costing, Photography, Technique of D. & P.; expert refractionist; fluent French. Write "A. T.," c/o Streets, 6 Gracechurch Street, London, E.C.3.

FOR SALE.

(Articles to the value of £5-£50.)

MUST BE CLEARED.—Premises disposed of; Stock and Fixtures of Old-established Drug Stores; Counters, Wall and Counter Showcases, Nests of Drawers, Shop Rounds and Jars; small all-round stock; suit beginner in small way; sacrifice for prompt cash. 187/30, Office of this Paper.

NATIONAL Cash Register; very little used; prints every transaction; gives total. Write R. Ross, 136 Grundy Street, London, E.14.

NUMEROUS Stock Rounds, lettered; Broken Drugs, Pills, various; Bottles; Ointment Tins; Scales; Weighing Machine; Pill Machines; Moulds; Cachet Machine; Glass Shelves; Ovals, etc. 187/21, Office of this Paper.

MISCELLANEOUS.

10s. for 60 words or less; 1s. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

CASH Registers.—National, all kinds, total adders, ticket issuers, printers, etc., box cash tills; fully guaranteed; no reasonable offer refused; all reliable makes bought, sold, exchanged, repaired; easy terms. Write or call, Deiches, 78 Long Lane, Smithfield, E.C.1. 'Phone: National 0674. Satisfaction guaranteed.

CHEMISTS' FITTINGS.—We hold an immense stock of Drug Fittings, Dispensing Screens, Glass-fronted Counters, Perfumery Cases, Nests of Drawers, Wall Cases, Silent Salesmen, Upright and Flat Counter Cases, Plate Glass Counters, Cash Tills, Display Stands and Glass Shelves, etc., at competitive prices. F. MAUND & E. BERG (SHOWCASES), LTD., Shop Fitters and Shop Front Builders, 175/9 Old Street, London, E.C.1.

FOR SALE.—Gas-heated Drying Machine fitted with gear and pulleys, together with Ball Mill and Gardner Sifter and Mixer. 263/510, Office of this Paper.

FOR SALE.—Liquid Paint-mixing Machine, 10-gallon capacity. 263/515, Office of this Paper.

FOR SALE.—Mixer with wood body and fitted with Sifter, also Receiving Drawers for sifted powder. 263/514, Office of this Paper.

FOR SALE.—Sifting Machine for sifting fine powders, also small Edge Runner Mill fitted with two runners, 263/513, Office of this Paper.

FOR SALE.—Small Sheet Steel Filling Hopper on legs, suitable for filling powder into cartons. 263/511, Office of this Paper.

FOR SALE.—Vertical Grinding Machine with interchangeable Sieves, small size. 263/512, Office of this Paper.

WANTED.—Sifter and Mixer, 100 to 300 lbs. capacity; power-driven machine required. Write, giving full particulars as to where may be seen, together with lowest price, to 262/481, Office of this Paper.

10 FT. Drug Fitting; 6 ft. Wall Case; 12 ft. Glass-fronted Counter; nests of Counter Drawers; 6 ft. Dispensing Screen and Counter; Counter Case; Personal Weighing Machine; Chair; all reconditioned and polished. PHILIP JOSEPHS & SONS, LTD., 90/92 St. John Street, Clerkenwell, E.C.1. Telephone: Clerkenwell 2191. "Pharmacy fitters for over a century."

£?—COMPLETE CHEMIST FITTINGS at any price you wish to pay. We have erected in our showrooms a Complete Chemist's Shop with Metal Shop Front, Window Backs, Correct Window Lighting Signs and Modern Interior Fittings. Apply for Lists, D. MATTHEWS & SON, LTD., "The Liverpool Shop Fitters," 14 and 16 Manchester Street, Liverpool. Est. 1848.

EXCHANGE COLUMN.

2d. per word, minimum 2s. (Box No., 1s. extra.)

FOR DISPOSAL.

(Articles up to the value of £5.)

OFFERS for complete bound volumes "Year Book of Pharmacy" from 1870 to 1927. Stiles, Lutterworth House, Alderson Drive, Doncaster.

WANTED.

GOOD Copy, "Anatomy of the Eye," by "Max Coque" or "Woolf"; state price. E. Still, High Street, Billericay, Essex.

SECOND-HAND Rotary or Single Punch Tablet Machines wanted. Particulars to 261/455, Office of this Paper.

THE CHEMIST'S COMPACT LIBRARY

Every book by an Expert

Pharmaceutical Formulas (P.F. Vol. I)

The tenth edition of this, the most complete pharmaceutical formulary in the English language, is devoted to the official and semi-official preparations of practically every country in the world. This volume (published 1929) contains 1146 pages

Price 15s. *net, by post* 15s. 9d.

Pharmaceutical Formulas (P.F. Vol. II)

Published 1934. Supplementary to Vol. I, and known as "The Chemists' Recipe Book." Contains formulas for adhesives, beverages, cleaning materials, culinary and household requisites, horticultural and agricultural preparations, inks, lozenges, perfumes, photographic preparations, polishes, soaps, toilet articles, varnishes, veterinary preparations, etc., including numerous descriptions of practical methods employed in their manufacture, and other information of use to pharmacists and manufacturers. Over 1000 pages.

Price 15s. *net, by post* 15s. 9d.

Pharmaceutical Botany

An attractively written book, dealing with the plants mentioned in the examination syllabus of the various pharmaceutical examining bodies. A useful gift for apprentices and assistants who have not passed the qualifying examinations.

Price 5s. *net, by post* 5s. 4d.

The Art of Dispensing

The tenth edition of this well-known work is now ready. The book has been thoroughly revised and considerably improved, while maintaining the features which have made it so popular with several generations of students. It is kept by chemists in the dispensary for ready reference in cases of difficulties arising in the course of the day's work.

Price 8s. *net, by post* 8s. 6d.

Veterinary Counter Practice

Chemists interested in veterinary practice will find the work indispensable, as it deals with the ailments of horses, cattle, sheep, pigs, dogs, and poultry, and the remedies that can be supplied. New edition 1930 (Eighth) brings this book thoroughly up to date.

Price 7s. 6d. *net, by post* 8s.

The Photographic Chemist

This is a concise guide to chemists commencing and carrying on a photographic department.

Price 3s. 6d. *net, by post* 3s. 8d.

Diseases and Remedies

Now in its sixth edition (March, 1931). It has been carefully revised by an experienced medical practitioner and parts of the book have been rewritten.

Price 5s. *net, by post* 5s. 3d.

Wootton's Chronicles of Pharmacy

In two vols., maroon cloth, comprising 770 pages

Price 10s. 6d. *net, by post* 11s. 3d.

Practical Methods of Urine Analysis

The object of this book is to give chemists exactly the information they want on the subject. The book was written by a pharmacist who was an expert in this work, and has been revised by a medical practitioner and lecturer of long experience in clinical analysis. (Fourth Edition). Contains 97 pages.

Price 4s. *net, by post* 4s. 3d.

The Chemists' Dictionary of Medical Terms

A small book which explains the meaning of medical terms as to which customers often inquire from chemists. In addition to concise definitions of these technical terms, notes are given on the treatment of the more important ailments.

Price 3s. 6d. *net, by post* 3s. 8d.

The *C. & D.* Price List Formulary, "P.L.F."

All users of the *C. & D.* Retail Dispensing Price List require a copy of this Formulary. It brings together the formulas for unofficial preparations, the prices of which are quoted in the Price List. It is a choice collection of good formulas for articles in everyday request by the public.

Price 2s. 6d. *post free*

Provincial Hospital Pharmacopœias

Uniform with the "Chemists' Dictionary," contains 296 pages and consists of formulas for medical prescriptions used in twenty-two hospitals and infirmaries in Great Britain outside the London district.

Price 3s. *net, by post* 3s. 2d.

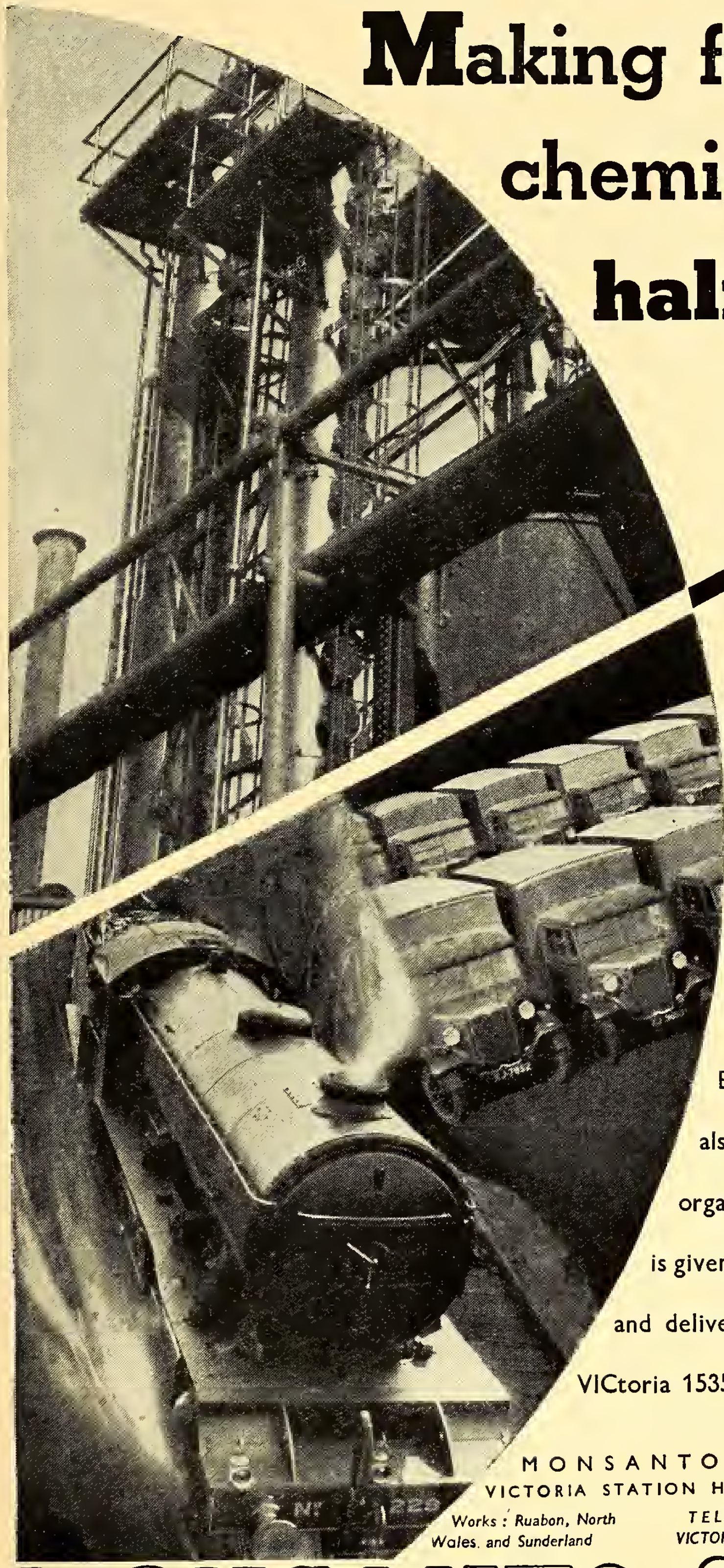
FOREIGN CORRESPONDENTS ARE REQUESTED TO NOTE THAT THE POSTAGE IS 2d. EXTRA FOR EACH BOOK.

May be obtained at the published prices from the Wholesale Drug or Sundries House or from :—

THE CHEMIST AND DRUGGIST, 28 ESSEX STREET, STRAND, LONDON, W.C.2

Branch Offices : Paris : Melbourne and Sydney, Australia ; Auckland, New Zealand ;
Manchester : 49 County Buildings ; Sheffield : 54 Foster's Buildings.
Glasgow : 19 Waterloo Street.

Printed in Great Britain for the Proprietors by Eyre and Spottiswoode Limited, His Majesty's Printers, East Harding Street, London, E.C.4, and Published by the Proprietors, MORGAN BROTHERS (Publishers), Limited, at 28 Essex Street, Strand, London, W.C.2.—*July* 6, 1935. [54/54]



Making fine chemicals is only half our job !

● Our Works at Ruabon, N. Wales, and Sunderland are organised for the manufacture of a wide range of organic Chemicals, and nearly every Monsanto product has that little extra in purity or condition that increases its real value to the user. But this is not all ! By buying from Monsanto you ensure also the utmost co-operation of a keenly organised service Staff whose whole time is given to securing the exact quality, packing and delivery you require. Why not telephone VICtoria 1535 some time and put us to the test ?

MONSANTO CHEMICALS LIMITED
VICTORIA STATION HOUSE, VICTORIA STREET, LONDON, S.W.1

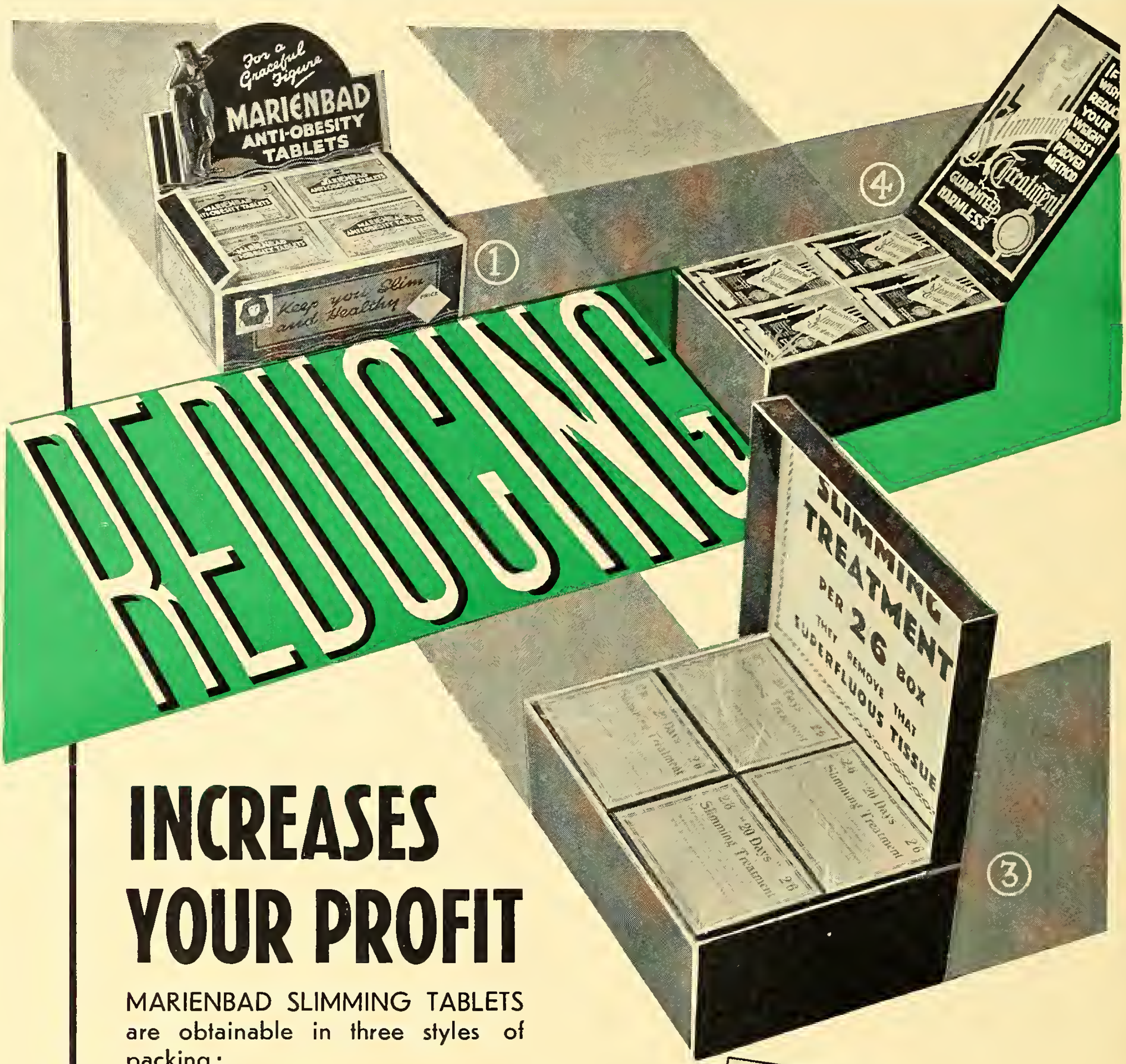
Works : Ruabon, North Wales. and Sunderland

TELEPHONE:
VICTORIA 1535

Northern Sales Office : King's House, King Street West, Manchester

MONSANTO SERVICE

TAS/MC.2


For a Graceful Figure
MARIENBAD ANTI-OBESITY TABLETS
Keep you Slim and Healthy
PRICE
①
④
IF YOU WISH TO REDUCE YOUR WEIGHT
PROVED METHOD
Slimming Treatment
GUARANTEED HARMLESS
REDUCING
SLIMMING TREATMENT
PER 2/6 BOX
THEY REMOVE THAT SUPERFLUOUS TISSUE
"20 Days" Slimming Treatment 2/6
③

INCREASES YOUR PROFIT

MARIENBAD SLIMMING TABLETS are obtainable in three styles of packing:

1) Marienbad Anti-Obesity Tablets
3) 20 Days' Slimming Treatment
4) Marienbad Slimming Treatment

Packed in card boxes containing 60 silver-coated tablets.
Weight Card and full diet instructions are enclosed in each box.

Price 9/6 dozen, usual retail price 2/-

NOW IS THE TIME TO FEATURE THESE PROFITABLE SPECIALITIES

Reduce!
RESTORE YOUR SLIM FIGURE OF YOUTH — SAFE — PLEASANT WAY
20 DAYS SLIMMING TREATMENT
A SCIENTIFIC AND ABSOLUTELY HARMLESS METHOD
TO BE SLIM IS TO
SLIM WITH SAFETY
THESE TABLETS HAVE BEEN FOUND TO CONTAIN NO POISONOUS OR HARMFUL SUBSTANCE ......
THEY MAY BE TAKEN REGULARLY BY ANYONE WITH ABSOLUTE SAFETY
REDUCE WITH PERFECT SAF

ARTHUR H. COX & Co. Ltd

Manufacturing Chemists, BRIGHTON

Printed in Great Britain for the Proprietors by EYRE AND SPOTTISWOODE LIMITED, His Majesty's Printers, East Harding Street, London, E.C.4, and Published by the Proprietors, MORGAN BROTHERS (Publishers), Limited, at 28 Essex Street, Strand, London, W.C.2.—*July* 6, 1935. [1½]

THE CHEMIST AND DRUGGIST

RETAIL & DISPENSING PRICE LIST

BASED ON DEFINITE COSTING PRINCIPLES

ISSUED QUARTERLY FOURTEENTH YEAR OF PUBLICATION

THE SELLING PRICES in this List are based on the given cost and calculated for the quantities specified, the total oncost for that turnover being then added, together with the net profit, to the nearest figure. In case of fractions the prices are rounded up or down to the most suitable figure. As in arriving at the prices allowance has been made for variations in specific gravity, *liquids should be sold by fluid measure and solids by weight.*

INTERMEDIATE QUANTITIES should be calculated on the lower figure until midway is passed, then on the higher figure. The range of the quantities quoted in the List may be increased as follows: For **one pint** add one-fourth to the 16 oz. selling price. The **gallon price** for oils is obtained by dividing the cwt. price by 6; for **7-lb.** sales multiply the lb. cost by 10; for **14-lb.** by 20; and for **28-lb.** by 38. For *intermediate drachm prices* divide 1-oz. quotations by 7 and multiply by the number of drachms required. To obtain the *grain prices* divide the drachm selling price by 50.

ADJUSTING PRICES.—While standard wholesale prices are used as the starting point for calculating the retail prices, it may be desired to adjust the selling price for variations in cost. This may be effected by the following simplified method: To obtain the **lb. selling price** add half to the cost price (yielding 33⅓ per cent. on return); for the **4-oz. selling price** divide the lb. cost by 10 and multiply by 4 (yielding 37.5 per cent.); for the **1-oz. selling price** divide the lb. cost by 9 (yielding 43.75 per cent.). This method also applies to lozenges and pastilles which remain at a firm cost price.

DISPENSING CHARGES.—The two systems given (p. 2) are based on a special investigation and should be used for all dispensing other than contract work. When the Rapid Method is employed the Edinburgh private mark MELBORACIS should be used. In the case of a prescription containing one or more ingredients of an expensive nature the Costing Method is used and the mark "C. & D." only ought then to be indicated beneath the chemist's stamp.

MONTHLY CHANGES.—Important changes in prices occurring between the quarterly issues of this List are notified in THE CHEMIST AND DRUGGIST. Subscribers are recommended to carry out these alterations in ink as they are published, and so keep the quarterly List up to date.

ABBREVIATIONS.—The references to standards or formulas in the List are: B.P. (British Pharmacopœia); U.S.P. (United States Pharmacopœia); B.P.C. (British Pharmaceutical Codex); M.O.H. (Ministry of Health); P.L.F. (Price List Formulary); N.I.F. (National Insurance Formulary).

"C. & D." DRUG INDEX

DRUGS (1913 = 100)

—	1934	1935
Jan.	144.3	144·3
Feb.	144.4	144·4
Mar.	143.5	144·6
April	143.6	144·6
May	143.6	144·7
June	143.5	144·7
July	143.5	·
Aug.	141.2	·
Sept.	140.6	·
Oct.	140.3	·
Nov.	140.2	·
Dec.	140.2	·

DRESSINGS (1913 = 100)

—	1934	1935
Jan.	136.5	136·3
Feb.	136.5	136·3
Mar.	136.0	136·2
April	136.0	136·2
May	136.0	136·2
June	136.0	136·2
July	136.0	·
Aug.	136.0	·
Sept.	136.3	·
Oct.	136.3	·
Nov.	136.3	·
Dec.	136.3	·

SALE RESTRICTIONS.—The small capital letters on the left-hand side of the retail price indicate the restrictions on the sale in Great Britain, and generally in Ireland, of the particular drug or chemical. The letters are used in the same sense as in *The Chemist and Druggist Diary*, 1935 (where full information of the restrictions is given), and the *C. & D.* series of Poisons Cards, the indications being as follows:—

A. Arsenic Act, 1851.

B. Part I of the Schedule of the Poisons and Pharmacy Act, 1908, and Section 17 of the Pharmacy Act, 1868; Section 2 of the Sale of Poisons (Ireland) Act, 1870, and Part I of the Fourth Schedule of the Pharmacy and Poisons Act (Ireland), 1925.

C. Part II of the Schedule of the Poisons and Pharmacy Act, 1908, and Section 17 of the Pharmacy Act, 1868; Section 2 of the Sale of Poisons (Ireland) Act, 1870, and Part II of the Fourth Schedule of the Pharmacy and Poisons Act (Ireland), 1925.

D. Agricultural and horticultural poisons according to Section 2 of the Poisons and Pharmacy Act, 1908.

E. Poisonous substances according to Section 5 of the Poisons and Pharmacy Act, 1908.

F. Dangerous Drugs Acts, 1920 to 1932 "Ex *F*" denotes that the preparation is exempted by Regulation.

PRICE LIST FORMULARY ("P.L.F.")—For the many unofficial preparations in active sale for which no standard formulas exist a special formulary has been compiled from "Pharmaceutical Formulas," "Veterinary Counter Practice" and other *C. & D.* publications. The cost and retail prices are given in this List and alterations made each month where changes in cost of ingredients make this necessary. The Price List Formulary is published at 2*s*. 6*d*. post free.

DRUG INDEX.—This *C. & D.* feature furnishes a comparative figure of the cost of drugs and appliances in 1913 and the present time. It is an important factor in accounting for the differences in retail charges now and before the war, and in the valuation of retail businesses.

STOCKTAKING SHEETS.—These sheets are used in conjunction with this List, in the annual stocktaking of drugs and chemicals, and form the simplest and quickest system of stock-taking for the drug-trade. The sheets, fastened into a pad, consist of the names of the articles printed on ruled paper in the same order as these occur in the List, which much facilitates the subsequent stage of pricing the stock from the cost figures. The sheets are sold in pads (2*s*. 6*d*. post free) with blank pages at the end.

Published as a Supplement to THE CHEMIST AND DRUGGIST, at 28 Essex Street, Strand, London, W.C.2.

CONTENTS

PAGE
DRUGS AND CHEMICALS - 3
AMPOULES - - - - - 27
CAPSULES - - - - - 27
TABLETS - - - - - - 28
SURGICAL DRESSINGS AND APPLIANCES - - - - - 30
SEROLOGICAL PRODUCTS - 31
VACCINES AND TUBERCULINS - 32

PRICING PRESCRIPTIONS

DISPENSED MEDICINES

There are two systems of charging for medicines dispensed on prescription, as follows :—

1. RAPID METHOD.—The cost represents a definite proportion of the charge and refers to ordinary drugs and chemicals with infusions or decoctions. Tinctures, syrups, extracts, if prescribed in any quantity, require the price adjusting by the list according to Method 2. The prices quoted are exclusive of containers. (See below.)

Mixtures of simple medicaments :—

Size	Dose ʒj.	Dose ʒij.	Dose ʒiv.	Dose ℥j.
	s. d.	*s. d.*	*s. d.*	*s. d.*
℥j.	1 0	0 10	0 9	0 8
℥ij.	1 6	1 2	1 0	0 10
℥iij.	—	1 6	1 3	1 0
℥iv.	—	1 10	1 6	1 2
℥vj.	—	—	2 0	1 6
℥viij.	—	—	2 6	1 10

		s. d.
Gargles, lotions, injections	8 oz.	1 6
Pills and powders	12	1 6
Cachets and dry-filled capsules	12	2 6
Ointments, mixed .. .. 1 oz., 1s. 3d.;	2 oz.	1 6
Suppositories, bougies, pessaries	12	2 0
Small shaped blisters	each	1 0
Plasters, 6 in. × 6 in.	each	2 6

An extra fee of 6d. per prescription is made for night attendance.

When this method of pricing is employed, the first dispenser of the prescriptions should mark the price charged by private mark. The Edinburgh private mark

M	e	l	b	o	r	a	c	i	s
1	2	3	4	5	6	7	8	9	0

which has been in use for many years, should be adopted.

Larger quantities, or those containing appreciable amounts of tinctures, etc., should be priced by Method 2.

2. COSTING METHOD.—This method is calculated on the aver time taken for the various operations involved in dispensing, and is ba on the recommendations in 1915 of the Departmental Committee on National Insurance Act Drug Tariff and the results obtained by numer correspondents. The three components of the price of a prescription be added together are as follows :—

A. The **selling prices** in this list are calculated upon costing princip and form a correct basis for obtaining the cost of the ingredients of a presc tion. For finding the price of drachm quantities other than those quotec the list, the rule that should be adopted is to divide the ounce quantity seven and multiply the figures obtained by the number of drachms requi

B. Prices of **containers** are given in the list. (See below.)

C. Special "**oncost**" included in the terms "time" and "labour" perform the work, and the special **establishment charges** of the disp sary above and beyond that already included in the distribution "onco

Modern medical treatment sometimes requires forms of medicat needing long periods of time in their preparation. No standard fee be laid down since time, the guiding factor, is unknown until the prescript is completed. A basic figure covering time with its essential oncost actual labour may be calculated on a rate of 60d. per hour or portions the in making up the final professional charge.

The accountant's figures for "oncost" are as follows :—

		s.
Uncompounded medicines of whatever nature		0
Mixtures, lotions, liniments, drops, rectal injections		0
Emulsions		0
Pills and weighed powders	doz.	0
Ointments, confections, etc.		0
Blisters		0
Cachets	doz.	1
Capsules, hard (cachet fitting)	doz.	1
Bougies, suppositories, pessaries	doz.	1
Plasters		1
Granules, pastilles, lozenges, soft capsules	doz.	2
Silvering, varnishing, and otherwise coating pills ..	doz. 3d. e	
Ampoules (filling and sterilising)	doz.	3
Solutions and oils in bulk (sterilising)	to 500 mils.	3
Oculenta (sterilised)	to 1 oz.	2
Powders, mixed, in bulk	to 4 oz.	0
Injections and hypodermic sterilising	to 1 oz.	2
Injections, intravenous and diagnostic sterilising ..	to 100 mils.	3
Hire of appliances	per week	2
Special registration fee of medicaments		0
Tuberculin and protein dilutions	per dose	2
	per 6 doses	3

As these charges cover average time, the fees for larger quantities be calculated according to the length of time required on the above b

When the Costing Method is used, mark "C. & D." under the n stamp on the prescription.

CONTAINERS

Retail charge

Medicine and Poison Bottles

	Sell *s. d.*		Sell *s. d.*		*s.*
2 dr., 4 dr., 1 oz.	0 2	10 oz. ..	0 3	20 oz. ..	0
2 oz., 3 oz. ..	0 2	12 oz. ..	0 3	32 oz. ..	0
4 oz.	0 2	16 oz. ..	0 4	40 oz. ..	0
6 oz., 8 oz. ..	0 2				

Iodine bottles add price of rubber stopper (3d.) to poison bottles.

Ointment Pots	Sell *s. d.*	Stoppered Bottles	Sell *s. d.*	Powder Bottles	*s.*
1 dr., 2 dr., ½ oz.	0 6	1 oz. ..	0 7	½ oz., 1 oz. ..	0
1 oz., 1½ oz. ..	0 7	2 oz. ..	0 8	2 oz.	0
2 oz.	0 8	4 oz. ..	0 9	4 oz.	0
3 oz.	0 10	6 oz. ..	0 10	6 oz.	0
4 oz	0 11	8 oz. ..	0 11		

Cost per	Drugs and Chemicals		Selling Price 16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
lb.	“A.C.E.” anæsthetic	C	7 6	2 6	—	—
lb.	Absinthium		1 6	0 6	0 2	—
lb.	Acaciæ gummi alb. elect.		7 6	2 2	0 7	—
lb.	Acaciæ gummi alb. parv. opt.		6 3	1 11	0 7	—
lb.	Acaciæ gummi alb. parv. sec.		5 3	1 6	0 5	—
lb.	Acaciæ gummi alb. pulv. opt.		6 0	1 9	0 6	—
lb.	Acaciæ gummi alb. pulv. sec.		4 10	1 5	0 5	—
lb.	Acaciæ gummi var. opt.		3 9	1 2	0 4	—
oz.	Acetamidosalol		—	—	4 0	0 7
oz.	Acetanilidum		—	—	0 7	0 2
oz.	Acetannin		—	—	3 3	0 6
lb.	Acetonum		2 6	0 9	0 3	—
lb.	Acetonum coml.		2 2	0 8	0 3	—
lb.	Acetum aromaticum P.L.F.		—	—	—	0 4
lb.	Acet. arom. P.L.F. (synth. ol.)		—	—	—	0 3
lb.	Acet. cantharidini	C	—	1 1	0 4	0 1
lb.	Acet. cantharidis	C	—	1 4	0 5	0 1
lb.	Acet. colchici	C	—	0 9	0 3	—
lb.	Acet. destillatum album		1 0	0 4	0 1½	—
gal.	Acet. fuscum		gal.	4 6	pint	0 7
lb.	Acet. fuscum (Beaufoy)		—	0 3	0 1	—
lb.	Acet. ipecacuanhæ	C	—	0 11	0 4	—
lb.	Acet. odoratum B.P.C.		—	5 6	1 6	—
lb.	Acet. rubi idæi		2 4	0 10	0 3	—
lb.	Acet. scillæ		1 2	0 5	0 2	—
gal.	Acet. vini Gallici		pint	1 3	0 2	—
tube	Acidol tablets		per	tube	1 6	—
50	Acidol pepsin (50 tabs.)		each	5 6	—	—
	Acida					
lb.	Acidum aceticum		1 0	0 4	0 1½	—
lb.	Acid. aceticum dilutum		0 9	0 3	0 1	—
lb.	Acid. aceticum glaciale		—	0 8	0 3	—
lb.	Acid. acetylsalicylicum		—	1 8	0 6	0 1
gr.	Acid. ascorbic synth.		—	0 3	grain	—
oz.	Acid. benzoicum nat.		—	—	4 5	0 9
lb.	Acid. benzoicum synth.		—	—	0 9	0 2
lb.	Acid. boricum cryst.		0 11	0 4	0 1½	—
lb.	Acid. borici pulv. subtil.		1 2	0 5	0 2	—
oz.	Acid. borici pulv. pkd.		—	0 7	0 2½	—
cwt.	Acid. borici coml. pulvis		7 lb.	3 5	–	—
lb.	Acid. borici coml. pulvis		1 0	0 4	0 1½	—
oz.	Acid. camphoricum		—	—	4 1	0 7
gal.	Acid. carbolicum "miscible"	C	pint	0 8	—	—
gal.	Acid. carbolicum " straw "	C	1 0	0 4	0 2	—
doz.	Acid. carbolicum (disinf.) pkd.		℥ viij.	1 2	—	—
lb.	Acid. carbol. (disinf. powder)		0 9	—	—	—
oz.	Acid. cinnamicum		—	—	2 4	0 4
lb.	Acid. citricum		2 7	0 9	0 3	—
lb.	Acid. citrici pulvis		2 9	0 10	0 3	—
lb.	Acid. cresylicum pur. (vap.)	C	—	1 0	0 4	—
lb.	Acid. formicum 50%		2 9	0 11	0 4	0 1
oz.	Acid. gallicum		—	—	1 2	0 3
oz.	Acid. glycerophosphoric. 20%		—	—	1 10	0 4
oz.	Acid. hippuricum		—	—	5 3	0 9
oz.	Acid. hydriodicum dilutum		—	—	1 1	0 2
lb.	Acid. hydrobrom. conc. 30%		—	1 8	0 7	—
lb.	Acid. hydrobrom. dilutum		—	0 9	0 3	0 1
lb.	Acid. hydrochloricum	E	1 7	0 6	0 2	0 1
lb.	Acid. hydrochloricum dilutum		—	0 5	0 2	—
lb.	Acid. hydrochloricum coml.	E	1 0	0 4	0 2	—
oz.	Acid. hydrocyan. (Scheele)	B	—	—	1 2	0 2
oz.	Acid. hydrocyan. dilutum	B	—	—	1 0	0 2
lb.	Acid. hydrofluor. coml. (by wt.)		2 6	0 10	0 3	—
lb.	Acid. hydrofluoric. dil. B.P.C.		1 8	0 6	0 2	—
lb.	Acid. hypophosphorosum dil.		—	1 2	0 7	0 1
oz.	Acid. lacticum		—	—	0 11	0 2
lb.	Acid. lacticum dilutum		2 8	0 8	0 3	0 1
oz.	Acid. molybdicum		—	—	2 0	0 4

Cost d.	per	Ac—Al Acida—(cont.)		Selling Price 16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
17	lb.	Acid. nitricum	E	3 2	0 11	0 3	—
8	lb.	Acid. nitricum dilutum		—	0 5	0 2	—
12	lb.	Acid. nitricum coml.	E	2 3	0 8	0 3	—
8	lb.	Acid. nitro-hydrochlor. dil.		—	0 5	0 2	—
12	lb.	Acid. oleicum		1 6	0 6	0 2	—
78	oz.	Acid. osmic. 1 per cent. sol.		—	—	11 4	1 9
21	lb.	Acid. oxalicum recryst.	C	—	0 10	0 3	0 1
13	lb.	Acid. oxalicum coml.	C	1 8	0 7	0 2	—
20	lb.	Acid. phosphoricum B.P.		—	1 4	0 5	—
8	lb.	Acid. phosphoricum dilutum		1 0	0 5	0 2	0 1
14	oz.	Acid. pyrogallicum sublim.		—	—	2 0	0 4
11	oz.	Acid. pyrogallicum cryst.		—	—	1 7	0 3
8	lb.	Acid. pyrolignosum		1 0	0 4	—	—
32	oz.	Acid. salicylicum nat.		—	—	4 8	0 10
30	lb.	Acid. salicylici pulvis		—	1 1	0 4	0 1
14	oz.	Acid. salicylsulphonicum		—	—	2 0	0 4
14	lb.	Acid. stearicum coml.		1 9	0 7	0 2	—
9	oz.	Acid. sulphanilic. recryst.		—	—	1 4	0 3
11	lb.	Acid. sulphuricum	E	2 6	0 10½	0 3	—
8	lb.	Acid. sulphuricum dilutum		—	0 5	0 2	—
7.5	lb.	Acid. sulphuricum coml.	E	1 9	0 6	0 2	—
8	oz.	Acid. sulphuricum aromaticum		—	—	1 2	0 2
8	lb.	Acid. sulphurosum		1 0	0 4	0 1	—
26	lb.	Acid. sulphuros. (in spirit)		—	1 0	0 4	—
7	oz.	Acid. tannicum		—	—	1 1	0 2
20	lb.	Acid. tartaricum cryst. mag.		2 6	0 9	0 3	—
21	lb.	Acid. tartaricum cryst. parv.		2 7	0 9	0 3	—
20	lb.	Acid. tartarici pulvis		2 6	0 9	0 3	—
21	oz.	Acid. trichloraceticum		—	—	3 1	0 6
21	oz.	Acid. valerianicum		—	—	3 1	0 6
21	lb.	Aconitum	B	—	1 1	0 4	0 1
32	lb.	Aconiti rad. pulv.	B	—	1 2	0 4	—
9	gr.	Aconitina	B	per	gr.	1 6	—
60	dr.	Acriflavinum		per	gr.	0 2	8 9
113	oz.	Adalin		—	—	—	2 4
34	25	Adalin tablets gr. 5		doz.	2 6	—	—
19	lb.	Adeps benzoatus		2 5	0 9	0 3	—
13	lb.	Adeps præparatus		1 8	0 7	0 2	—
17	lb.	Adeps lanæ		2 2	0 8	0 3	—
15	lb.	Adeps lanæ hydrosus		2 0	0 7	0 3	—
9	gr.	Adrenalinum		per	gr.	1 4	—
41	oz.	Adrenalin.chlor.sol.1-1,000(P.D.)		—	—	5 0	0 9
27	oz.	Adrephine (P.D.)		—	—	3 0	—
39	lb.	Æther anæsthet. by wgt.		5 0	1 5	—	—
24	lb.	Æther methylicus 0.730		3 0	1 0	0 4	—
8	oz.	Æther aceticus		—	—	1 2	0 2
72	lb.	Æther chloricus		—	2 6	0 9	—
7	oz.	Æther ozonicus		—	—	1 1	0 3
31	ea.	Æthylis chloride (30 c.c.)		ea.	4 0	—	—
42	ea.	Æthylis chloride (50 c.c.)		ea.	5 3	—	—
72	lb.	Agar (shredded)		—	2 7	0 9	—
84	lb.	Agar pulvis		—	3 0	0 10	—
51	oz.	Agotan		—	—	—	1 3
48	50	Agotan tablets		doz.	1 6	—	—
21	lb.	Agropyrum Ang.		—	0 10	0 3	—
50	oz.	Airol		—	—	—	1 1
90	oz.	Albargin		—	—	—	2 0
7	oz.	Albumen (egg) pulv.		—	—	0 11	0 2
8	oz.	Albumin. (blood) pulv.		—	—	0 8	—
12	oz.	Albumin. tannic.		—	—	1 9	0 3
262	pt.	Alcohol 90% sine rebate		24 0	7 0	1 9	0 4
108	pt.	Alcohol 90% c̄ rebate		11 0	3 3	1 0	0 2
274	pt.	Alcohol 95% s. r.		—	—	1 9	0 3
168	lb.	Alcohol dehydrat.		—	6 0	1 9	0 3
315	lb.	Alcohol abs. (sine rebate)		—	10 3	2 8	0 5
128	lb.	Alcohol ammon. fort. B.P.C.	E	—	—	1 3	0 3
42	lb.	Alcohol amylicum		5 3	1 6	0 5	0 1

Cost		Al—Am	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
33	lb.	Alcohol amylicum coml.	4 3	1 2	0 4	—
36	pt.	Alcohol isopropylicum	4 0	1 1	0 4	—
360	lb.	Alcohol methylicum pur.	—	11 8	3 0	0 6
24	oz.	Aldehydum alcoh. 20%	—	—	3 6	—
42	dr.	Allantoinum	—	—	—	6 2
40	lb.	All Fours P.L.F.	—	1 8	0 7	0 2
18	lb.	Allium sativum	2 3	0 8	0 3	—
162	100	Allonal tablets *B*	doz.	2 7	—	—
55	oz.	Allosan	—	—	7 0	1 4
39	lb.	Aloe Barbadensis	5 0	1 5	0 5	—
39	lb.	Aloe Barbadensis pulvis opt.	5 0	1 5	0 5	0 1
15	lb.	Aloe Capensis	1 9	0 7	0 2	—
20	lb.	Aloe Capensis pulvis	2 6	0 9	0 3	—
66	lb.	Aloe Socot. pulvis	8 3	2 5	0 9	0 2
13	oz.	Aloinum	—	—	2 0	0 4
28	gm.	Alopon (A. & H.) *B, F*	per	gr.	0 4	—
60	lb.	Althææ flores	—	2 2	0 8	—
18	lb.	Althææ folia	2 3	0 8	0 3	—
24	lb.	Althææ rad. decort.	3 0	0 11	0 4	—
30	lb.	Althææ rad. dec. pulvis	3 9	1 1	0 4	—
13	lb.	Alumen	1 8	0 6	0 2	—
15	lb.	Alumen pulv.	2 0	0 7	0 2	—
4	lb.	Alumen coml.	0 7	0 2	0 1	—
252	cwt.	Alumen coml.	7 lb.	2 0	—	—
4.5	lb.	Alumen coml. pulv.	0 8	0 3	—	—
276	cwt.	Alumen coml. pulv.	14 lb.	4 0	7 lb.	2 2
21	lb.	Alumen chromicum recryst.	—	0 10	0 3	—
9	lb.	Alumen chromicum coml.	1 3	0 6	0 2	—
17	lb.	Alumen exsiccatum	2 2	0 8	0 3	—
18	lb.	Alumen exsiccatum pulv.	2 3	0 8	0 3	—
13	lb.	Alumen rupel	1 8	0 7	0 2	—
6	oz.	Aluminii acetas	—	—	0 11	0 2
8	oz.	Aluminii aceto-tartras	—	—	1 2	0 2
45	lb.	Aluminii chloridum (hydrated)	—	1 8	0 6	0 1
42	lb.	Aluminii hydroxidum	5 3	1 6	0 5	0 1
12	oz.	Aluminii salicylas	—	—	1 9	0 3
21	lb.	Aluminii sulphas	—	0 10	0 3	—
9	lb.	Aluminii sulphas coml.	1 2	0 4	—	—
16	oz.	Aluminii tannas	—	—	2 0	0 4
14	oz.	Amidol	—	—	1 9	0 3½
26	oz.	Amidopyrina	—	—	3 9	0 7
42	oz.	Amidopyrinæ camphorat.	—	—	6 2	1 0
38	oz.	Amidopyrinæ salicylas	—	—	5 7	0 10
51	lb.	Ammoniaci pulvis	—	—	0 6	0 1
45	lb.	Ammoniacum opt. (gtt.)	—	—	0 6	0 1
		Ammonium				
4	oz.	Ammon. acetas pur.	—	—	0 7	0 1
30	oz.	Ammon. benzoas nat.	—	—	4 5	0 8
78	lb.	Ammon. benzoas synth.	—	2 10	0 10	0 2
18	lb.	Ammon. bicarb.	—	0 8	0 3	0 1
36	lb.	Ammon. bichromas cryst.	—	1 4	0 5	—
36	lb.	Ammon. bromidum	—	1 4	0 5	—
15	lb.	Ammon. carb. resub.	2 0	0 7	0 2	—
15	lb.	Ammon. carb. resub. pulv.	2 0	0 7	0 2	—
9	lb.	Ammon. carb. coml.	1 1	0 4	0 2	—
8	lb.	Ammon. carb coml. (qty.)	1 0	—	7 lb.	6 3
11	lb.	Ammon. carb. coml. pulv.	1 4	0 5	0 2	—
11.5	lb.	Ammon. carb. coml. pulv. (qty.)	1 6	—	7 lb.	9 8
15	lb.	Ammon. chloridum pur.	1 10	0 7	0 2	—
11	lb.	Ammon. chloridum coml.	1 5	0 5	0 2	—
11	lb.	Ammon. chloridum " lumps "	1 5	—	7 lb.	8 3
7	oz.	Ammon. citras	—	—	1 1	0 2
60	lb.	Ammon. formas	—	2 3	0 8	0 2
36	oz.	Ammon. hippuras	—	—	5 3	1 9
12	lb.	Ammon. hydrosulph. sol.	1 6	0 7	0 3	—
13	oz.	Ammon. hypophosphis	—	—	1 11	0 4
18	oz.	Ammon. iodidum	—	—	2 8	0 5

Cost		Am—An **Ammonium**—(cont.)	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
48	lb.	Ammon. monocarb. arom.	—	—	0 6	0 2
18	lb.	Ammon. nitras pur.	2 3	0 8	0 3	—
9	lb.	Ammon. nitras, coml.	1 2	0 4	0 2	—
27	lb.	Ammon. oxalas pur. *E*	—	1 0	0 4	0 1
36	lb.	Ammon. persulphas	—	1 4	0 5	0 1
36	lb.	Ammon. phosphas	4 6	1 4	0 5	0 1
15	lb.	Ammon. phosphas coml.	1 10	0 7	0 2	—
42	lb.	Ammon. phosphas acid.	—	1 7	0 6	0 1
8	oz.	Ammon. salicylas	—	—	1 2	0 3
21	oz.	Ammon. succinas	—	—	3 1	0 6
12	lb.	Ammon. sulphas pur.	—	0 6	0 2	—
5	lb.	Ammon. sulphas coml.	0 8	0 3	—	—
210	cwt.	Ammon. sulphas coml.	7 lb.	1 8	—	—
42	lb.	Ammon. sulphocyanidum	—	—	0 6	0 1
6	oz.	Ammon. tartras	—	—	0 11	0 2
21	oz.	Ammon. valerianas cryst.	—	—	3 1	0 6
75	oz.	Ammona lunstd.	—	—	—	1 10
67	5 amp	Amphotropin sol.	1 9	single	amp.	—
32	lb.	Amygdala amara	4 0	1 2	0 4	—
48	lb.	Amygdala dulcis Jordan	6 0	1 9	0 6	—
42	lb.	Amygdala dulcis Valent.	5 3	1 6	0 6	—
60	lb.	Amygd. dulc. pulv. alb.	7 6	2 2	0 7	0 1
24	lb.	Amygd. cont. (Almond meal)	3 0	0 11	0 3	—
30	lb.	Amyl acetas pur.	—	1 2	0 4	—
26	lb.	Amyl acetas coml.	3 1	0 11	0 4	—
9	oz.	Amyl nitris	—	—	—	0 3
20	doz.	Amyl nitrite capsules ♏3	doz.	2 6	—	—
36	oz.	Amyleni hydras	—	—	5 3	0 9
360	cwt.	Amyli pulvis (maize)	7 lb.	2 9	—	—
7	lb.	Amyli pulvis (maize)	0 11	0 3	0 1	—
6	lb.	Amyli pulvis (potato)	0 9	0 3	0 1	—
8	lb.	Amyli pulvis (rice)	1 0	0 4	0 1	—
8	lb.	Amyli pulvis (wheat)	1 0	0 4	0 1	—
36	dr.	Amylocain hyd.	—	—	—	0 3 (grain
54	oz.	Anæsthesin	—	—	—	1 2
14	lb.	Anchusæ radix	1 9	0 7	0 2	—
9	lb.	Anethi fructus E.I.	1 2	0 5	0 2	—
16	lb.	Anethi fructus pulvis	2 0	0 7	0 2	—
60	lb.	Angelicæ radix	7 6	2 2	0 8	—
72	lb.	Angelicæ radicis pulvis	9 0	2 7	0 9	—
4	oz.	Anilini hydrochlor.	—	—	0 7	0 1
15	lb.	Anilinum coml. opt.	1 10	0 7	0 2	—
12	lb.	Anisi fructus	1 6	0 6	0 2	—
15	lb.	Anisi fructus pulvis	2 0	0 7	0 3	—
14	lb.	Anisi fructus pulvis (crs.)	1 9	0 7	0 3	—
14	oz.	Anisole	—	—	2 0	0 4
39	lb.	Annatto (roll)	—	1 5	0 5	—
36	lb.	Annatto (liquid)	—	1 7	0 6	—
96	lb.	Anthemidis flores Ang.	—	3 5	1 0	—
42	lb.	Anthemidis flores exot.	5 3	1 5	0 5	0 1
48	lb.	Anthemidis florum exot. pulv.	—	1 9	0 6	0 1
36	lb.	Anthemidis flores exot. sec.	4 6	1 2	0 4	—
12	lb.	Antiformin substitute	1 6	0 6	0 2	—
60	oz.	Antikamnia, unstd.	—	—	—	1 6
60	oz.	Antikamnia tablets, unstd.	doz.	1 6	—	—
18	lb.	Antimonii crocus pulv.	2 3	0 8	0 3	—
7	oz.	Antimonii et sodii tartras	—	—	1 1	0 2
648	doz.	Antim. et sodii tart. sterules (M'dale) gr. ½ (box of 10)	box	6 0	—	—
864	doz.	Antim. sod. tart. sterules (M'dale) gr. ij. (box of 10)	box	8 0	—	—
12	lb.	Antim. nig. pulv.	1 3	0 6	0 2	—
6	oz.	Antim. oxidum	—	—	1 0	0 2
42	lb.	Antimonium sulphuratum	5 3	1 6	0 5	0 1
42	lb.	Antimonii tartarati pulv. *B*	5 3	1 6	0 6	0 1
6	oz.	Antim. et pot. tart. "intraven."	—	—	1 0	0 2

Cost		An—Ar	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
43	oz.	Antitoxine tabs., unstd.	doz.	0 9	—	—
		Antitoxins (*v.* Serological Products, page 31)				
62	10c.c.	Antuitrin 'S' P. D. & Co.	—	18 0	each	—
45	lb.	Apii grav. sem.	5 6	1 7	0 6	—
30	oz.	Apiol	—	—	—	0 8
10	gr.	Apomorphinæ hydroch. *B*	per	gr.	1 6	—
		Aquæ				
8	lb.	Aqua anethi	1 0	0 4	0 2	—
98	lb.	Aqua anethi conc.	—	7 0	2 0	0 4
8	lb.	Aqua anisi dest.	1 0	0 4	0 2	—
62	lb.	Aqua anisi conc. 1-40	—	5 9	1 7	0 4
19	lb.	Aqua aurantii flor. trip.	2 6	0 9	0 3	—
8	lb.	Aqua camphoræ	1 0	0 4	0 1½	—
54	lb.	Aqua camphoræ conc.	—	2 0	0 7	0 1
8	lb.	Aqua cari dest.	1 0	0 4	0 1½	—
74	lb.	Aqua cari conc. 1-40	—	6 2	1 10	0 4
8	lb.	Aqua caryophylli dest.	1 0	0 4	0 1½	—
92	lb.	Aqua caryophylli conc.	—	6 10	2 0	0 4
8	lb.	Aqua chloroformi	1 0	0 4	0 1½	—
0	lb.	Aqua chloroformi conc. B.P.C.	—	2 2	0 8	0 2
9	lb.	Aqua cinnamomi	1 3	0 5	0 2	—
8	lb.	Aqua cinnamomi conc.	—	7 0	2 0	0 4
3	gal.	Aqua destillata	0 4	0 2	—	—
2	lb.	Aqua Florid. (isoprop.)	—	3 6	1 0	—
8	lb.	Aqua fœniculi	1 0	0 4	0 1	—
6	lb.	Aqua fœniculi conc.	—	6 7	1 10	0 4
5	lb.	Aqua laurocerasi *B*	2 0	0 7	0 2	—
4	lb.	Aqua lavand.opt.(isoprop.) P.L.F.	—	10 4	2 9	0 5
2	lb.	Aqua lavand.sec.(isoprop.) P.L.F.	—	5 0	1 4	0 3
1	lb.	Aqua mellis (isoprop.) P.L.F.	—	2 10	0 9	—
3	lb.	Aqua menthæ pip. dest.	1 8	0 7	0 2	—
6	lb.	Aqua menthæ pip. conc. Ang.1-40	—	7 6	2 0	0 4
8	lb.	Aqua menthæ pip. conc. exot.1-40	—	7 0	2 0	0 4
4	lb.	Aqua menthæ viridis dest.	1 9	0 7	0 2	—
4	lb.	Aqua picis P.L.F.	1 9	0 7	0 2	—
9	lb.	Aqua pimentæ dest.	1 2	0 5	0 2	—
8	lb.	Aqua pimentæ conc. 1-40	—	7 6	2 1	0 4
8	lb.	Aqua pulegii dest.	1 0	0 4	0 1	—
3	lb.	Aqua rosæ dest.	1 8	0 7	0 2	—
3	lb.	Aqua rosæ trip. opt.	2 3	0 8	0 3	—
5	lb.	Aqua rosæ conc. 1-40	—	7 9	2 4	0 4
0	lb.	Aqua rosmarini	1 3	0 5	0 2	—
3	lb.	Aqua rosmarini conc. 1-40	—	6 0	1 8	0 3
	lb.	Aqua sambuci	1 5	0 6	0 2	—
	lb.	Aqua sambuci trip.	3 0	0 11	0 3	—
	lb.	Aqua sambuci conc. 1-40	—	—	2 3	0 4
	oz.	Araroba	—	—	1 1	0 2
	dr.	Arbutin	—	—	—	3 6
	lb.	Archil	2 4	0 9	0 3	—
	lb.	Arctii radix	2 2	0 8	0 3	—
	lb.	Arctii radicis pulvis	3 3	1 0	0 4	—
	lb.	Areca	—	—	0 2	—
	lb.	Arecæ pulvis	1 10	0 7	0 2	—
	gr.	Arecolinæ hydrobromidum *B*	per	gr.	0 6	—
	oz.	Argenti bromidum	—	—	—	1 6
	oz.	Argenti chloridum	—	—	—	1 0
	oz.	Argenti iodidum	—	—	—	1 6
	oz.	Argenti nitras cryst.	—	—	6 4	0 11
	doz.	Argenti nit. (points in glass)	ea.	1 2	—	—
	doz.	Argenti nit. ind. (in wood)	ea.	0 6	—	—
	oz.	Argenti nit. mitigat. (sticks)	ea.	1 0	—	—
	oz.	Argenti nucleinas	—	—	5 3	0 9
	oz.	Argenti oxidum	—	—	—	1 4
	oz.	Argenti proteinatum	—	—	2 8	0 5
	oz.	Argenti vitellin	—	—	6 9	1 0

Cost		Ar—Be	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
60	oz.	Argentum colloidale	—	—	—	1 3
9	25	Argentum (fol.)	per	leaf	0 1	—
90	oz.	Argyrol	—	—	—	1 10
31	40	Arheol capsules	doz.	1 2	—	—
360	oz.	Aristochin	—	—	—	8 7
45	½ oz.	Aristol	—	—	—	2 0
27	lb.	Aristolochiæ radix	3 6	1 0	0 4	—
36	lb.	Aristolochiæ radicis pulvis	4 6	1 4	0 5	—
21	lb.	Arnicæ flores	—	0 11	0 4	—
36	lb.	Arnicæ rhizoma	—	1 4	0 5	—
48	lb.	Arnicæ rhizomæ pulvis	—	—	0 6	0 1
15	lb.	Arsenicum album coml. *A, B*	2 0	0 7	0 3	—
11	lb.	Arsenicum album coml. pulv. *A, B*	1 6	0 5	—	—
648	cwt.	Arsenicum album coml. pulv. *A, B*	7 lb.	5 3	—	—
12	oz.	Arsenii bromidum *A, B*	—	—	—	0 4
36	oz.	Arsenii tri-iodidum *B*	—	—	—	0 9
20	lb.	Arsenii trioxid. *A, B*	—	—	0 3	—
21	lb.	Arsenii sulphid. flav. pulv. *B*	2 9	1 0	0 4	—
18	lb.	Arsenii sulphid. rub. pulv. *B*	2 3	0 10	0 4	—
42	oz.	Arseno-triferrin *B*	—	—	—	1 0
18	30	Arseno-trifer. tablets gr. 5 *B*	doz.	1 3	—	—
66	lb.	Asafetida opt. (gtt.)	—	2 6	0 9	0 2
30	lb.	Asafetida coml.	—	1 2	0 5	—
63	lb.	Asafetidæ pulv.	—	—	0 8	0 2
72	lb.	Asbestos opt.	—	2 7	0 9	—
12	lb.	Asbestos coml.	1 6	0 6	0 2	—
78	oz.	Asparagin	—	—	11 4	1 9
9	lb.	Asphaltum	1 3	0 4	0 2	—
27	lb.	Asthma powder B.P.C. *C*	—	1 0	0 4	—
72	oz.	Atophan *B*	—	—	—	1 9
132	100	Atophan tablets gr. 7½ *B*	doz.	2 1	—	—
132	100	Atoquinol tablets	doz.	2 1	—	—
48	dr.	Atropina *B*	per	gr.	0 3	—
42	dr.	Atropinæ sulphas *B*	per	gr.	0 3	—
72	lb.	Aurantii cortex Ang.	—	2 7	0 9	0 2
42	lb.	Aurantii cortex exot.	5 3	1 6	0 5	—
3	gr.	Auri bromidum	per	gr.	0 5	—
40	each	Auri chloridum (15 gr. tubes)	ea.	5 0	—	—
30	oz.	Auri chloridum sol. (2%)	—	—	3 9	—
		B				
26	lb.	Balsamum anisi P.L.F.	—	1 2	0 4	—
11	oz.	Balsamum Peruvianum	—	—	2 0	0 4
21	lb.	Balsamum sulphuris	3 6	1 0	0 4	—
6	oz.	Balsamum tolutanum	—	—	1 0	0 2
		Bandages—see page 30				
25	oz.	Barbitonum *B*	—	—	3 8	0 7
26	oz.	Barbitonum solubile *B*	—	—	3 9	0 7
21	lb.	Barii carbonas pur. præc. *C*	2 9	0 10	0 3	—
10	lb.	Barii carbonas coml. *C*	1 3	0 5	0 2	—
12	lb.	Barii chloridum pur. *C*	1 6	0 6	0 2	—
18	lb.	Barii hydroxidum pur. *C*	2 3	0 8	0 3	—
20	lb.	Barii nitras pur. cryst. *C*	2 6	0 9	0 3	—
10	lb.	Barii nitras coml. *C*	1 3	0 5	0 2	—
24	lb.	Barii peroxidum anhyd. *C*	3 0	0 11	0 3	—
18	lb.	Barii sulphas B.P.	2 3	0 8	—	—
108	doz.	Barii sulphas puriss. pkd.	—	1 4	—	—
4	oz.	Barii sulphidum *C*	—	—	0 7	0 2
8	lb.	Bath powder P.L.F.	1 0	—	—	—
8	lb.	Battery solution P.L.F.	1 9	—	—	—
17	lb.	Bay rum (industrial) P.L.F.	2 0	0 7	0 3	—
81	doz.	Bay rum (indust.) pkd.	℥ iij.	1 0	—	—
4.5	lb.	Bay salt	0 7	0 3	—	—
360	cwt.	Bay salt	7 lb.	2 9	14 lb.	5 0
21	dr.	Beberinæ sulphas	—	—	—	3 1
51	lb.	Belladonnæ fol. Ang.	—	—	0 7	—

Cost		Be—Bo	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
69	lb.	Belladonna pulverata C	—	2 6	0 9	0 2
28	lb.	Belladonnæ rad. pulv. C	—	—	0 4	—
30	lb.	Benedict's reagent (qualit.)	4 3	1 4	—	—
5	oz.	Benzaldehydum pur.	—	—	0 9	0 2
33	dr.	Benzaminæ hydrochloridum	—	0 3	per	4 10
33	dr.	Benzaminæ lactas	—	0 3	gr.	4 10
42	dr.	Benzamin base	—	—	—	6 4
15	lb.	Benzenum	1 9	0 6	0 2	—
36	oz.	Benzocaina	—	—	—	0 10
51	lb.	Benzoinum Sumat.	—	2 0	0 7	0 1
54	lb.	Benzoini pulv.	6 9	2 0	0 7	0 1
4	pt.	Benzol coml.	—	0 8	0 3	—
7	oz.	Benzonaphthol	—	—	1 1	0 2
54	oz.	Benzosol	—	—	7 11	1 2
6	oz.	Benzyl benzoas	—	—	0 11	0 2
28	lb.	Berberidis pulvis	3 6	1 0	0 4	0 1
27	dr.	Berberinæ sulphas	—	—	—	4 0
33	oz.	Betainæ hydrochloridum	—	—	5 0	0 9
40	oz.	Betol	—	—	5 10	1 0
		" Bipp " (*v.* Past. bis. et iod.)				
30	lb.	Bird-lime	3 9	1 2	0 4	—
21	lb.	Bird-lime qty.	—	7-lb.	tins	18 3
126	lb.	Bisedia (Schacht) C	—	4 0	1 0	0 2
		Bismuthum				
20	oz.	Bismuthi benzoas	—	—	3 0	0 6
26	oz.	Bismuthi betanaphthol.	—	—	3 9	0 7
110	lb.	Bismuthi carbonas	—	4 0	1 1	0 2
14	oz.	Bismuthi citras	—	—	2 0	0 4
21	oz.	Bismuthi et ammon. citras	—	—	3 1	0 6
18	oz.	Bismuthi hydroxidum	—	—	2 8	0 5
30	oz.	Bismuthi iodidum (oxy.)	—	—	4 5	0 8
26	oz.	Bismuthi lactas	—	—	3 9	0 7
10	oz.	Bismuthi nitras cryst.	—	—	1 6	0 3
10	oz.	Bismuthi oleas	—	—	1 6	0 3
22	oz.	Bismuthi oxidum	—	—	3 3	0 6
20	oz.	Bismuthi oxychloridum	—	—	3 3	0 6
22	oz.	Bismuthi oxychlor. puriss.	—	—	3 3	0 6
45	oz.	Bismuthi oxyiodogallas	—	—	6 9	1 0
66	oz.	Bismuthum precip.	—	—	—	1 5
12	oz.	Bismuthi salicylas	—	—	1 9	0 3
13	oz.	Bismuthi subgallas	—	—	2 0	0 4
102	lb.	Bismuthi subnitras	—	3 8	1 0	0 2
15	oz.	Bismuthi tannas	—	—	2 3	0 4
18	oz.	Bismuthi tartras solub.	—	—	2 8	0 5
25	oz.	Bismuthi tribromophen.	—	—	3 8	0 7
45	oz.	Bismuthi valerianas	—	—	6 9	1 0
80	lb.	Blue. Chin., pulv.	10 0	2 10	0 9	0 2
60	lb.	Blue, Pruss., pulv.	7 6	2 2	0 8	0 2
15	lb.	Boldo folia	2 0	0 7	0 2	—
8	lb.	Bole Armen.	1 0	0 4	0 1	—
32	lb.	Boraldehyde (D.F.)	1 6	bot.	2 6	bot.
16	lb.	Borax calcinatus	2 0	0 7	0 2	—
6.5	lb.	Borax cryst. (Howards)	1 0	0 4	0 1½	—
4.5	lb.	Borax coml. cryst.	0 7	0 2	0 1	—
6	lb.	Borax purificatus cryst...	0 9	0 3	0 1	—
6	lb.	Boracis purificati pulvis	0 9	0 3	0 1	—
—	—	Boracis purificati pulvis (pkd.)	—	0 4½	0 1½	—
5	lb.	Boracis coml. pulvis	0 8	0 3	0 1	—
360	cwt.	Boracis coml. pulvis	7 lb.	2 10	14 lb.	5 0
12	lb.	Bordeaux mixture P.L.F.	1 6	—	—	—
		Boric lint (see p. 31)				
		Boric wool (see p. 30)				
84	oz.	Bornyl valerianas	—	—	—	1 10
9	gm.	Borocaina	grm.	1 0	—	—
12	tube	Borocain c̄ adrenalin tabs.	tube	1 6	—	—

Cost		Bo—Ca	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
30	lb.	Borothymol	—	1 2	0 4	—
30	lb.	Boroglycerinum B.P.C.	3 9	1 1	0 4	0 1
16	10 gm	Brilliant green	—	—	—	1 0
174	lb.	Brilliantine, separable, P.L.F.	—	6 3	1 8	—
126	lb.	Brilliantine, separ. (isoprop.)	—	4 6	1 4	—
180	lb.	Brilliantine, inseparable, P.L.F.	—	6 5	1 9	—
90	lb.	Brilliantine, insepar. (isoprop.)	—	3 3	1 0	—
55	4 oz.	Bromidia unstd. C	—	6 11	1 9	0 3
13	oz.	Bromoformum	—	—	—	0 11
6	oz.	Bromum	—	—	3 0	0 6
42	doz.	Bromum (2 c.c. tubes)	ea.	0 7	—	—
95	oz.	Bromural	—	—	—	2 4
39.5	20	Bromural tablets gr. 5	doz.	3 0	—	—
27	oz.	Brucina B	—	—	4 0	0 7
24	oz.	Brucinæ sulphas B	—	—	3 6	0 6
18	lb.	Bryoniæ albæ radix	2 3	0 8	0 3	—
36	lb.	Buchu	—	1 4	0 5	0 1
9	lb.	Burgundy mixture P.L.F.	1 2	—	—	—
15	oz.	Butyl-chloral hydras	—	—	2 3	0 4
45	℥xx.	Bynin (A. & H.)	—	1 2	0 4	—
29	20	Butolan. tabs.	—	2 6	per	doz.
		C				
12	oz.	Cadmii bromidum	—	—	1 9	0 3
21	oz.	Cadmii iodidum	—	—	3 1	0 6
11	oz.	Cadmii sulphide	—	—	1 8	0 3
16	oz.	Caffeina	—	—	2 4	0 4
12	oz.	Caffeinæ benzoas	—	—	1 6	0 3
10	oz.	Caffeinæ citras	—	—	1 8	0 3
48	lb.	Caffeinæ citras effervescens	—	1 9	0 6	—
27	oz.	Caffeinæ hydrobromidum	—	—	4 0	0 7
40	oz.	Caffeinæ iodidum	—	—	6 4	0 10
21	oz.	Caffeinæ salicylas	—	—	3 1	0 6
15	oz.	Caffeinæ sodio-benzoas	—	—	2 3	0 4
30	oz.	Caffeinæ sodio-iodidum	—	—	4 5	0 8
15	oz.	Caffeinæ sodio-salicylas	—	—	2 3	0 4
44	oz.	Caffeinæ valerianas	—	—	6 5	1 0
12	lb.	Calami aromatici radix	—	0 6	0 2	—
18	lb.	Calami aromatici rad. pulvis	2 3	0 9	0 3	—
30	lb.	Calamina artif. P.L.F.	3 9	1 2	0 4	0 1
26	lb.	Calamina præparata	3 3	1 0	0 4	—
		Calcium				
27	lb.	Calcii acetas	—	1 0	0 4	0 1
18	oz.	Calcii acetylsalicylas	—	—	2 8	0 5
7	oz.	Calcii bromidum exic.	—	—	1 1	0 2
6	lb.	Calcii carbonas	0 8	0 3	0 1	—
15	lb.	Calcii chloridum fusum	2 0	0 7	0 2	—
6	lb.	Calcii chloridum coml.	0 10	0 4	—	—
11	lb.	Calcii chloridum cryst.	1 5	0 6	0 2	—
13	lb.	Calcii chloridum gran.	1 9	0 7	0 2	—
9	oz.	Calcii citras	—	—	1 4	0 3
6	oz.	Calcii formas	—	—	0 9	0 1
7	oz.	Calcii gluconas	—	—	0 11	0 2
8	oz.	Calcii glycerophos.	—	—	1 2	0 2
96	oz.	Calcii guaiacol-sulphonas	—	—	14 0	2 0
11	lb.	Calcii hydroxid	1 5	0 6	0 2	—
6	oz.	Calcii hypophosphis	—	—	0 11	0 2
24	oz.	Calcii iodidum	—	—	3 6	0 6
26	lb.	Calcii lactas	3 3	0 11	0 3½	0 1
8	oz.	Calcii lactophosphas	—	—	1 2	0 2
3	oz.	Calcii oxalas	—	—	0 6	0 1
16	oz.	Calcii peroxidum	—	—	2 3	0 4
15	lb.	Calcii phosphas	3 9	1 1	0 4	—
8	lb.	Calcii phosphas coml.	1 0	0 4	0 2	—
12	lb.	Calcii phosphatis acidi pulvis	1 6	0 6	0 2	—

Cost		Ca	Selling Price			
d.	per	Calcium—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
54	lb.	Calcii phosphas di-acidus ..	—	1 10	0 7	0 1
33	lb.	Calcii phosph. mono-acid. ..	—	1 3	0 5	0 1
24	lb.	Calcii saccharas	3 0	0 11	0 3	—
5	lb.	Calcii sulphas	0 7	0 3	—	—
6	oz.	Calcii sulphocarbolas	—	—	0 9	0 2
4	lb.	Calcii superphosphas coml. ..	0 6	0 2	—	—
10	cwt.	Calcii superphosphas coml. ..	7 lb.	1 9	14 lb.	3 4
13	lb.	Calx	1 8	0 6	0 2	—
4	lb.	Calx chlorinata	0 10	0 3	0 1	—
4	oz.	Calx sulphurata	—	—	0 7	0 1
48	lb.	Calendulæ flores	—	1 9	0 6	0 1
		Calf lymph (v. Lymph) ..				
13	lb.	Calumbæ radix	1 8	0 7	0 2	—
15	lb.	Calumbæ radicis pulvis ..	1 11	0 8	0 3	—
9	oz.	Cambogia	—	—	1 4	0 3
10	oz.	Cambogiæ pulvis	—	—	1 6	0 3
57	lb.	Camphora (flores)	7 6	2 2	0 7	0 1
64	lb.	Camphora (1-oz. tab.)	—	—	0 8	—
66	lb.	Camphora (¼-oz. tab.)	—	—	0 9	—
16	oz.	Camphora monobromata ..	—	—	2 4	0 5
45	lb.	Camphoræ synthet. pulv. ..	—	1 8	0 6	0 1
68	5	Campolon, 2 c.c.	each	1 9	—	—
8	lb.	Canary seed	1 0	0 4	—	—
30	lb.	Canellæ cortex	—	1 1	0 4	—
66	lb.	Canellæ corticis pulvis	—	1 4	0 5	0 1
78	oz.	Cannabinæ tannas .. C	—	—	11 4	1 8
6.5	gr.	Cantharidinum .. .. B	—	—	—	1 0
66	lb.	Cantharis Chinensis .. B	—	2 5	0 9	—
0	lb.	Cantharis Russ. .. .. B	—	5 5	1 7	—
4	lb.	Cantharidis Chin. pulv. B	10 6	3 0	0 10	0 2
4	lb.	Caoutchouc	—	3 0	1 0	—
6	box	Caprokol caps.	per	box	7 0	—
2	lb.	Capsici fructus	2 9	0 10	0 3	—
4	lb.	Capsici fructus pulvis sec. ..	3 0	0 11	0 3	—
1	oz.	Capsicin.	—	—	—	0 6
4	lb.	Carbo animalis gran.	1 9	0 6	0 2	—
1	lb.	Carbonis animalis pulvis ..	1 4	0 5	0 2	—
6	lb.	Carbo ligni	0 9	0 2½	0 1	—
.5	lb.	Carbonis ligni pulvis levigatus..	1 3	0 4½	0 1½	—
5	lb.	Carbonis ligni salicis pulvis ..	1 10	0 6	0 2	—
7	lb.	Carbon disulphidum	5 3	1 7	0 5	0 1
5	lb.	Carbon disulphidum coml. ..	3 0	1 0	0 4	—
8	lb.	Carbon tetrachloridum ..	6 0	1 10	0 7	0 1
1	oz.	Carbromalum	—	—	7 5	1 1
7	lb.	Cardamomi sem. pulv. dec. ..	—	3 2	0 11	0 2
2	oz.	Carminum opt.	—	—	6 4	0 11
3	oz.	Carminum sec.	—	—	4 10	0 9
5	lb.	Carron oil P.L.F.	1 10	0 7	0 2	—
3	lb.	Carum	1 7	0 7	0 2	—
5	lb.	Carum pulvis	2 0	0 7	0 2	—
4	lb.	Carum pulvis (coarse)	1 9	0 6	—	—
5	lb.	Caryophyllum opt.	—	1 4	0 5	—
	lb.	Caryophyllum sec.	2 0	0 7	0 2	—
	lb.	Caryophylli pulvis sec.	2 8	0 10	0 3	—
	16 oz.	Cascara evacuant (P.D.) ..	15 9	4 6	1 4	0 3
	lb.	Cascarilla	—	3 8	1 0	0 2
	lb.	Caseinum (solub.)	3 0	1 0	0 4	0 1
	lb.	Caseinum album lev.	5 3	1 7	0 5	0 1
	lb.	Caseinum glycerophos. B.P.C...	4 6	1 4	0 5	—
	lb.	Cassiæ corticis pulvis	2 0	0 7	0 2	—
	lb.	Cassiæ fructus	—	0 7	0 2	—
	lb.	Cassiæ pulpa	—	1 6	0 6	—
	lb.	Cataplasma kaolini	1 3	0 6	—	—
	lb.	Catechu	2 7	0 10	0 3	—
	lb.	Catechu pulvis	3 3	1 0	0 4	—
	lb.	Catechu nigrum	1 9	0 7	0 2	—
	lb.	Catechu nigri pulvis	2 6	0 9	0 3	—

Cost		Ca—Co	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
28	oz.	Caulophyllinum	—	—	3 6	0 8
30	lb.	Cera alba in massa	3 9	1 1	0 4	—
31	lb.	Cera alba in placentis	3 10	1 2	0 4	—
32	lb.	Cera carnauba (grey)	4 0	1 2	0 4	—
54	lb.	Cera flava Ang.	6 9	2 0	0 7	—
28	lb.	Cera flava exot.	3 6	1 0	0 4	—
32	lb.	Cera flava exot. .. (1-oz. tab.)	4 0	1 2	0 4	—
12	lb.	Cera Japonica	1 6	0 6	0 2	—
33	lb.	Ceratum calaminæ	4 2	1 3	0 5	—
16	lb.	Ceresina coml. alba	2 0	0 7	0 2	—
15	lb.	Ceresina coml. flava	1 11	0 7	0 2	—
4	oz.	Cerii oxalas	—	—	0 7	0 1
23	lb.	Cetaceum	3 0	0 11	0 3	—
31	lb.	Cetacei pulvis	4 0	1 2	0 4	—
16	lb.	Cetraria Islandica	2 0	0 7	0 2	—
		Charta epispast. (11 in. × 8 in.)	each	1 3	—	—
48	lb.	Chilblain lotion P.L.F. ..	—	—	0 8	—
63	lb.	Chilblain paint P.L.F.	—	—	0 9	—
42	oz.	Chinosol	—	—	—	1 0
19	lb.	Chirata incisa	2 6	0 9	0 3	—
10	oz.	Chloral camphorat. B.P.C. C	—	—	—	0 3
20	oz.	Chloral formamidum	—	—	2 11	0 5
7	oz.	Chloral hydras C	—	—	1 1	0 2
8	oz.	Chloramina	—	—	1 2	0 2
126	oz.	Chloralose	—	—	—	2 8
26	oz.	Chlorbutol	—	—	—	0 7
66	oz.	Chloretone (P.D.)	—	—	—	1 5
123	doz.	Chloretone Inhalant, 10 c.c. ..	each	1 3	—	—
81	lb.	Chlorodynum B.P.C. .. B, F	—	4 6	1 3	0 3
		Chlorodynum (v. Tinct. chlor. et morph. 1885)				
45	lb.	Chloroformum C	—	2 5	0 9	—
120	lb.	Chlorof. aconiti B.P.C. B	—	6 5	1 10	0 4
120	lb.	Chlorof. belladonnæ B.P.C. B	—	7 0	2 0	0 4
102	lb.	Chlorof. camphoratum B.P.C. C	—	—	1 9	0 4
24	oz.	Chlorophyllum (oil-sol.) ..	—	—	3 6	0 6
24	oz.	Chlorophyllum (spirit-sol.) ..	—	—	4 1	0 7
60	oz.	Cholesterol	—	—	8 9	1 3
27	lb.	Chondrus crispus elect. ..	3 5	1 0	0 4	—
9	oz.	Chromii trioxid	—	—	1 4	0 3
9	oz.	Chromii trioxid pur.	—	—	1 4	0 3
13	oz.	Chrysarobinum	—	—	2 0	0 4
10	oz.	Chrysoidin	—	—	1 6	0 3
13	gm.	Cignolin	—	0 3	per	grain
16	lb.	Cimicifugæ rhizoma	—	0 8	0 3	0 1
24	lb.	Cimicifug. rhizomæ pulvis ..	—	0 11	0 4	0 1
54	lb.	Cinchonæ calisayæ cort. pulvis	—	2 0	0 7	0 1
51	lb.	Cinchonæ pallid. cort. pulvis ..	—	2 0	0 7	0 1
45	lb.	Cinchonæ succirub. cortex ..	—	1 8	0 6	0 1
30	lb.	Cinchonæ succirub. cort. parv.	—	1 1	0 4	0 1
32	lb.	Cinchonæ succirub. cort. pulvis	—	1 2	0 4	0 1
87	oz.	Cinchonidina	—	—	—	1 10
54	oz.	Cinchonidinæ hydrochloridum	—	—	—	1 2
57	oz.	Cinchonidinæ sulphas	—	—	—	1 3
54	oz.	Cinchonina	—	—	—	1 2
48	oz.	Cinchoninæ hydrochloridum ..	—	—	—	1 0
42	oz.	Cinchoninæ sulphas	—	—	—	0 11
27	oz.	Cinchophenum	—	—	4 0	0 7
10	oz.	Cinnamic aldehyde	—	—	1 6	0 3
42	lb.	Cinnamomi cortex opt. ..	5 3	1 6	0 6	—
33	lb.	Cinnamomi cortex sec. ..	4 2	1 3	0 5	—
24	lb.	Cinnamomi cortex parv. ..	3 0	0 11	0 4	—
30	lb.	Cinnamomi cort. pulvis opt. ..	3 9	1 1	0 4	0 1
67	oz.	Citrarin	—	—	—	1 8
9	oz.	Cobalti chloridum	—	—	1 4	0 3
7	oz.	Cobalti nitras	—	—	1 1	0 2
96	dr.	Cocaina .. .. .. B, F	per	gr.	0 5	14 0
90	dr.	Cocainæ hydrochlor. .. B. F	per	gr.	0 5	13 0

Cost		Co	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
90	dr.	Cocainæ nitras .. .. *B, F*	per	gr.	0 5	13 0
90	dr.	Cocainæ salicylas .. *B, F*	per	gr.	0 5	13 0
44	100cc	Cocaine eye-drops (factory) *B, F*	℥ss.	1 8	—	—
36	lb.	Coccus (silver grain)	4 6	1 4	0 4	0 1
39	lb.	Cocci pulvis	5 0	1 5	0 5	0 1
28	lb.	Cocculi indici pulvis .. *C*	3 0	1 0	0 4	—
26	lb.	Coconut stearin	3 3	1 0	0 4	—
75	dr.	Codeina .. .. .. *B*	per	gr.	0 3	10 9
63	dr.	Codeinæ phosphas .. *B*	per	gr.	0 3	9 0
69	dr.	Codeinæ sulphas .. *B*	per	gr.	0 3	10 0
255	oz.	Codeonal .. .. .. *B*	—	—	—	6 0
29	10	Codeonal tablets, 2½ gr. *B*	doz.	4 4	—	—
22	lb.	Colchici corm. exot. pulv. (20) *C*	—	0 10	0 3	—
42	lb.	Colchici sem. pulvis	—	1 6	0 6	0 1
15	gr.	Colchicina .. .. *B*	per	gr.	2 3	—
15	gr.	Colchicinæ salicylas .. *B*	per	gr.	2 3	—
		Collodia				
33	lb.	Collodium flexile	—	1 3	0 5	0 1
42	lb.	Collodium acetonum B.P.C. ..	—	1 6	0 6	0 1
14	oz.	Collodium anodynum B.P.C. *B*	—	—	2 0	0 4
10	oz.	Collodium belladonnæ B.P.C. *B*	—	—	1 6	0 3
50	lb.	Collodium salicylicum B.P.C. ..	—	1 10	0 7	0 1
168	lb.	Collodium salicyl. co. B.P.C. *C*	—	—	1 9	0 3
102	lb.	Collodium stypticum B.P.C. ..	—	—	1 0	0 2
18	oz.	Collodium vesicans .. *C*	—	—	2 8	0 6
36	℥iv.	Collosol argent. (Crookes) ..	—	4 0	1 6	0 3
54	℥iv.	Collosol arsen. (Crookes) *C*	—	6 0	1 9	0 3
54	℥iv.	Collosal bism. (Crookes) ..	—	6 0	1 9	0 3
41	℥iv.	Collosol hydr. (Crookes) ..	—	4 6	1 4	0 3
50	℥iij.	Collosol hydrarg. et sulphur. (Crookes)	—	5 6	1 6	0 3
22.5	℥iv.	Collosol iodine (Crookes) ..	—	2 6	0 9	0 2
45	℥iv.	Collosol iodine in oil	—	5 0	1 6	0 3
45	℥j.	Collosol manganese (inj.) ..	—	—	5 0	0 9
36	℥iv.	Collosol quinine	—	4 0	1 2	0 2
31.5	℥viij.	Collosol sulphur	—	2 0	0 6	0 1
54	lb.	Colocynthidis pulpa	—	2 0	0 7	0 1
48	lb.	Colocynthidis pulpæ pulvis ..	—	1 9	0 6	0 1
35	4 oz.	Colofine (Oppenheimer) ..	—	4 4	1 2	0 3
11	lb.	Colophonii pulv.	1 6	0 6	0 2	—
8	lb.	Colophonium	1 0	0 4	0 2	—
27	lb.	Composition essence	—	1 0	0 4	—
24	lb.	Composition powder P.L.F. ..	—	0 11	0 3	—
61	50	Compral tablets	doz.	2 0	—	—
30	lb.	Confectio guaiaci co. B.P.C. ..	4 0	1 2	0 4	0 1
30	lb.	Confectio paraffini B.P.C. ..	3 9	1 2	0 4	—
30	lb.	Confectio petrolei	3 9	1 2	0 4	—
33	lb.	Confectio piperis	—	1 3	0 4	0 1
39	lb.	Confectio rosæ gallic.	—	1 3	0 5	—
18	lb.	Confectio sennæ	2 4	0 9	0 3	—
33	lb.	Confectio sennæ et sulph. B.P.C.	4 2	1 3	0 4	—
38	lb.	Confectio sulphuris	5 0	1 6	0 5	0 1
54	oz.	Congo Red	—	—	—	1 2
14	gr.	Conina .. .. .. *B*	per	gr.	1 2	—
8	gr.	Coninæ hydrobromidum *B*	per	gr.	1 2	—
39	lb.	Copaiba	5 0	1 5	0 6	0 1
9	oz.	Copaibæ resina	—	—	1 4	0 3
32	lb.	Copal elect.	4 3	1 3	0 5	—
30	lb.	Copal pulv.	3 9	1 4	0 5	—
36	each	Coramine 1·7c.c., 5 amps. ..	—	4 0	per	box
8	lb.	Coriandrum	1 0	0 4	0 1	—
12	lb.	Coriand. pulvis	1 6	0 6	0 2	—
10	lb.	Coriand. pulvis (crs.)	1 3	0 5	0 2	—
		Corn solvent (*v.* Collod. callos.)				
110	lb.	Coster's paste	—	—	0 8	0 2
57	dr.	Cotarninæ hydrochloridum *B*	per	gr.	2 2	8 4
57	dr.	Cotarninæ phthalas .. *B*	per	gr.	2 2	8 4

Cost		Co—De	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
96	dr.	Cotoinum	per	gr.	0 3	—
16	oz.	Coumarinum	—	—	2 4	0
66	lb.	Creme d'amandes, scented ..	8 6	2 5	0 8	—
54	lb.	Creme d'amandes, unscented ..	6 9	2 0	0 7	—
54	lb.	Cremor bismuthi	8 6	2 10	0 9	—
44	lb.	Cremor frigidum P.L.F. ..	—	1 7	0 6	—
24	lb.	Cremor frigidum P.L.F. ..	—	1 0	0 4	—
24	lb.	Crem. frig. "American" P.L.F.	—	1 0	0 4	—
22	lb.	Crem. frigid. "theatrical" P.L.F.	2 9	0 10	—	—
36	lb.	Crem. zinci B.P.C.	4 6	1 4	0 5	—
15	oz.	Creosoti carbonas	—	—	2 2	0
45	lb.	Creosotum .. .. *C*	—	1 8	0 6	0
18	lb.	Cresol .. .. .. *C*	2 3	0 8	0 3	—
21	lb.	Creta cum camphora 12½% ..	2 8	0 10	0 3	—
15	lb.	Creta c. camph. 10%	2 0	0 7	0 3	—
18	lb.	Creta Gallica (tab.)	2 3	0 8	0 3	—
360	cwt	Cretæ Gall. pulvis	7 lb.	2 9	14 lb.	5
6	lb.	Cretæ Gall. pulvis	0 9	0 3	0 1	—
7	lb.	Cretæ Gall. pulvis subtil. ..	0 10	0 3	0 1	—
6	lb.	Creta præparata	0 9	0 3	0 1	—
8	lb.	Creta præparata rubra	1 0	0 4	0 2	—
72	oz.	Crocus Valent.	—	—	—	1
78	oz.	Crocus Valent. pulv.	—	—	—	1
54	lb.	Croup embrocation P.L.F. ..	6 9	2 0	0 7	—
36	10 gm	Cryogenine	—	—	—	2
18	10	Cryogenine tablets gr. 4 ..	doz.	2 9	—	—
20	oz.	Crystal violet (medicinal) ..	—	—	3 0	0
42	lb.	Cubebæ fructus	—	1 6	0 6	—
54	lb.	Cubebæ fructus pulvis	—	2 0	0 7	0
26	lb.	Cucumber cream	—	1 0	0 4	—
54	lb.	Cucumber paste	6 0	1 9	0 6	—
192	lb.	Cucumber pomade	—	6 10	2 0	—
22	lb.	Cudbear	—	0 10	0 3	—
16	lb.	Cumini fructus	2 0	0 7	0 2	—
22	lb.	Cumini fructus pulvis	2 9	0 10	0 3	—
19	lb.	Cumini fructus pulvis (crs.) ..	2 4	0 8	0 3	—
22	lb.	Cupri ammon. sulph.	2 9	0 10	0 3	—
54	lb.	Cupri carbonas pur.	—	2 0	0 7	—
36	lb.	Cupri chloridum pur.	4 6	1 4	0 5	—
39	lb.	Cupri nitras	5 0	1 5	0 5	—
46	lb.	Cupri oleas	5 9	1 8	0 6	0
5	oz.	Cupri oxidum pur.	—	—	0 10	0
24	lb.	Cupri oxidum coml.	2 8	0 9	0 3	—
48	lb.	Cupri oxyacet. pulv. (ærugo) ..	6 0	1 9	0 6	—
15	lb.	Cupri sulphas	2 0	0 7	0 2	—
6	lb.	Cupri sulphas coml. opt. ..	0 9	0 3	0 1	—
609	cwt.	Cupri sulphas coml.	7 lb.	4 8	14 lb.	8
9	lb.	Cupri sulphas coml. pulvis ..	1 2	0 4	—	—
30	lb.	Cupri sulphas exsiccatus ..	3 9	1 1	0 4	—
60	lb.	Cuprum (filings)	—	2 2	0 8	—
54	lb.	Cuprum (foil)	—	2 0	0 7	—
42	lb.	Cuprum (turnings)	5 3	1 6	0 5	0
10	lb.	Curcumæ rhizoma	1 3	0 5	0 2	—
12	lb.	Curcumæ rhizomæ pulvis ..	1 6	0 6	0 2	—
10	lb.	Curcumæ rhizomæ pulvis (crs.)	1 3	0 5	0 2	—
36	lb.	Currie powder opt. P.L.F. ..	4 6	1 4	0 5	—
22	lb.	Currie powder sec. P.L.F. ..	2 9	0 10	0 3	—
66	lb.	Cydoniæ semina	—	2 5	0 9	—
		D				
30	lb.	Dale's plaster P.L.F. .. *C*	—	1 1	0 4	—
42	lb.	Damar gummi	5 3	1 7	0 5	—
36	lb.	Daturæ tatulæ pulvis	—	1 4	0 5	0
24	gr.	Daturina .. .. *B*	per	gr.	3 6	—
24	gr.	Daturinæ sulphas *B*	per	gr.	3 6	—
36	lb.	Dec. agropyri conc. 1 to 7 ..	—	1 4	0 6	0
12	lb.	Dec. agropyri recens	1 6	0 6	0 2	—
24	lb.	Dec. aloes co.	—	0 11	0 3	—

Cost		De—Ea	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
3	lb.	Dec. aloes co. conc. 1 to 3 ..	—	1 3	0 4	0 1
0	lb.	Dec. aloes co. recens	3 9	1 2	0 4	—
2	lb.	Dec. cinch. rubr. conc. 1 to 7 ..	—	1 6	0 6	0 1
6	lb.	Dec. cinchonæ flav. c. 1 to 7 ..	—	1 4	0 5	0 1
4	lb.	Dec. cuspariæ conc. 1 to 7 ..	—	2 0	0 7	0 1
4	lb.	Dec. dulcamar. conc. 1 to 7 ..	—	1 7	0 6	0 1
4	lb.	Dec. gossypii rad. cort. rec. ..	3 0	1 0	0 3	—
1	lb.	Dec. granati cort. conc. 1 to 7 ..	—	2 0	0 7	0 1
	lb.	Dec. hæmat. conc. 1 to 7 ..	—	1 2	0 4	0 1
4	lb.	Dec. hæmatoxyli recens ..	1 9	0 7	0 2	—
4	lb.	Dec. hemidesmi conc. 1 to 7 ..	—	2 1	0 8	0 2
2	lb.	Dec. mezerei conc. 1 to 7 ..	—	1 7	0 6	0 1
	lb.	Dec. papaveris conc. 1 to 7 *C*	—	1 2	0 5	0 1
5	lb.	Dec. papav. et anth. conc. *C*	—	1 8	0 6	0 1
3	lb.	Dec. pareiræ conc. 1 to 7 ..	—	1 9	0 6	0 1
5	lb.	Dec. quercus conc. 1 to 7 ..	—	1 4	0 5	0 1
5	lb.	Dec. sarsæ Jam. (simp.) conc. 1 to 7	—	2 5	0 9	0 2
	lb.	Dec. sars. Jam co. conc. 1 to 7	—	2 0	0 7	0 1
	lb.	Dec. sarsæ co. conc. 1 to 7 ..	—	2 2	0 8	0 2
	lb.	Dec. scoparii conc. 1 to 7 ..	—	1 1	0 4	0 1
	lb.	Dec. senegæ conc. 1 to 7 ..	—	1 4	0 5	0 1
	lb.	Dec. taraxaci conc. 1 to 7 ..	—	1 8	0 6	0 1
	lb.	Dec. ulmi conc. B.P.C. 1 to 7 ..	—	2 1	0 7	0 1
	lb.	Dec. uvæ ursi conc. 1 to 7 ..	—	1 2	0 4	0 1
	oz.	Dermatol	—	—	4 7	0 8
	lb.	Derris pulv.	5 0	1 5	0 5	—
	lb.	Devonshire oils P.L.F. ..	—	0 5	0 2	—
	lb.	Dextrin. alb.	0 11	0 4	0 2	—
	lb.	Dextrin. flav.	0 11	0 4	0 2	—
	lb.	Dextrosum	1 9	0 7	0 2	—
	12	Dial tablets, orig. tube .. *B*	tube	2 0	—	—
	100	Dial tablets .. .. *B*	doz.	1 6	—	—
	oz.	Diamidophenol. hydrochloridum	—	—	1 9	0 3
	dr.	Diamorphinæ hydrochl. *B, F*	per	gr.	0 4	—
	lb.	Diapente P.L.F.	2 0	0 7	0 2	—
	oz	Diastasum	—	—	3 0	0 7
	lb.	Dicalcium phosphate (P.D.) ..	6 0	2 0	—	—
	oz.	Dichloramin.—T.	—	—	5 3	0 9
	lb.	Dichlorobenzene ortho. ..	—	1 4	0 5	—
	lb.	Dichlorobenzene para	—	1 4	0 5	—
	15c.c.	Digalen .. .. .. *C*	—	—	8 6	1 4
	25	Digifoline tablets .. *C*	doz.	1 6	—	—
	oz.	Digifortis (P.D.)	—	—	—	0 7
	gr. 15	Digipuratum .. .. *C*	per	gr.	0 2	—
	10c.c.	Digipuratum liq. .. *C*	—	—	—	1 4
	12	Digipuratum tablets .. *C*	doz.	3 0	—	—
	gr.	Digitalinum amorph. .. *B*	per	gr.	1 1	—
	gr.	Digitalinum cryst. .. *B*	per	gr.	15 10	—
	40	Digitaline granules (Nativ.) ..	doz.	0 11	—	—
	lb.	Digitalis folia Ang. .. *C*	—	1 6	0 6	0 1
	lb.	Digitalis pulverata .. *C*	—	—	0 8	0 2
	gr.	Digitonin .. .. *B*	—	—	—	—
	100	Dimol pulverettes	doz.	1 0	—	—
	4 oz.	Dimol syrup	—	—	1 4	0 3
	gm.	Dioninum .. .. *B*	per	gr.	0 4	—
	oz.	Diuretin	—	—	—	1 0
	20	Diuretin tablets gr. 7½	doz.	1 8	—	—
	oz.	Dolichos pubes	—	—	7 6	1 2
1	oz.	Dormigene pulv. (A. & H.) *B*	—	—	—	2 7
	gr.	Duboisinæ sulphas .. *B*	per	gr.	1 10	—
	lb.	Dulcamara	—	0 9	0 3	—
	lb.	Dusting powder P.L.F. ..	—	1 3	0 4	—
		E				
3	lb.	Eau de Cologne opt. P.L.F. ..	34 6	10 0	2 10	0 6
1	lb.	Eau de Cologne opt. (isoprop.)	—	5 9	1 9	0 4
2	lb.	Eau de Cologne sec.	23 0	6 0	1 9	0 5

Cost		Ea—El	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
		Eau de Cologne sec. pkd. ..	—	8 6	℥ij.	2 6
126	lb.	Eau de Cologne sec. (isoprop.)	—	4 6	1 4	0 3
14	oz.	Eikonogen	—	—	1 9	0 4
6	gr.	Elaterinum	per	gr.	1 0	—
72	dr.	Elaterium Ang.	per	gr.	0 3	—
30	lb.	Elemi	—	1 2	0 4	—
		Elixir				
54	lb.	Elixir aletridis B.P.C.	—	2 0	0 7	0 1
84	lb.	Elixir aromaticum B.P.C. ..	—	3 3	1 0	0 2
96	lb.	Elixir aurantii B.P.C.	—	3 6	1 0	0 2
99	lb.	Elixir aurantii comp. B.P.C. ..	—	3 6	1 0	0 2
54	lb.	Elixir benzyl benzoatis	—	2 2	0 7	—
54	lb.	Elixir bismuthi B.P.C.	—	2 3	0 8	—
48	lb.	Elixir bismuth sal. B.D.H. ..	—	2 2	0 8	—
48	lb.	Elixir bromoformi B.P.C. ..	—	2 0	0 7	—
72	lb.	Elixir camphoræ monobromatæ	—	2 10	0 9	—
123	lb.	Elixir cascaræ et euonymi B.P.C.	—	5 6	1 5	—
80	lb.	Elixir cascaræ sag. P.L.F. ..	10 0	2 10	0 10	—
32	lb.	Elixir cascaræ sag.	—	1 7	0 6	—
75	lb.	Elixir cinchonæ B.P.C. ..	—	2 10	0 9	0 2
54	lb.	Elixir cocæ B.P.C. .. *C*	—	2 0	0 7	—
57	lb.	Elixir codein. co. .. *C*	—	2 8	0 8	—
57	lb.	Elixir codein. co. B.D.H. ..	—	2 2	0 8	—
48	lb.	Elixir diamorph. et pini co. *B, F*	—	2 0	0 8	—
48	lb.	Elixir diamor. et ter. B.P.C. *B, F*	—	1 10	0 7	0 1
72	lb.	Elixir diamorph. et terp. c. apomorph. B.P.C. .. *C, ex F*	—	2 9	0 10	—
68	16 oz.	Elixir enzymes (Armour) ..	—	2 2	0 7	0 1
54	lb.	Elixir ephedrin	—	2 0	0 7	—
54	lb.	Elixir ethylmorph. et terp. *C*	—	2 3	0 9	—
102	lb.	Elixir ferri, quin. et strych. phos. B.P.C.	—	4 6	1 4	—
45	lb.	Elixir formatum B.P.C. ..	—	1 9	0 6	0 1
56	lb.	Elixir formatum co.	—	2 2	0 8	0 2
66	lb.	Elixir glusidi B.P.C.	—	2 6	0 9	—
92	lb.	Elixir guaiacol. co.	—	3 3	0 11	—
32	lb.	Elixir idæi co.	—	1 10	0 6	—
30	lb.	Elixir ipecacuanhæ B.P.C. ..	—	1 2	0 4	0 1
30	lb.	Elixir kolæ B.P.C.	—	1 2	0 4	0 1
19	4 oz.	Elixir lactated pepsin (Armour)	—	2 9	0 9	0 2
70	16 oz.	Elixir lactopeptin.	—	2 3	0 8	0 2
63	lb.	Elixir lecithin B.P.C.	—	2 4	0 8	—
72	lb.	Elixir lecithini compositum ..	—	2 8	0 10	0 2
66	lb.	Elixir luminal .. .. *C*	—	2 6	0 10	—
93	lb.	Elixir papaini B.P.C.	—	3 5	1 0	—
72	lb.	Elixir pepsini B.P.C.	—	2 7	0 9	0 2
68	lb.	Elixir pepsini co. P.L.F. ..	—	2 5	0 8	—
57	lb.	Elixir pepsini et bism. co. B.P.C.	—	2 2	0 8	—
54	lb.	Elixir peptolacticum	—	2 3	0 8	—
66	lb.	Elixir phosphori B.P.C. ..	—	2 5	0 8	0 2
90	lb.	Elixir phosphori co. B.P.C. ..	—	3 3	1 0	—
54	lb.	Elixir pini compositum *B, F*	—	2 3	0 9	—
30	lb.	Elixir pruni virg.	—	1 4	0 6	—
90	lb.	Elixir quininæ ammon. B P.C.	—	3 3	0 11	0 2
78	lb.	Elixir quininæ amm. co. B.P.C.	—	2 10	0 10	—
52	lb.	Elixir rhei B.P.C.	—	2 2	0 7	0 2
32	lb.	Elixir rubi idæi	—	1 9	0 6	—
33	lb.	Elixir sennæ fructus B.P.C. ..	—	1 3	0 5	—
30	lb.	Elixir simplex B.P.C.	—	1 6	0 5	0 1
72	16 oz.	Elixir terpheroini co. (D.F.) *B, F*	—	3 0	0 10	—
108	16 oz.	Elixir terpheroini (Squire) *B, F*	—	3 6	1 0	0 2
78	lb.	Elixir terpheroini co. .. *B, F*	—	3 6	1 0	—
96	lb.	Elixir viburn. prunif. B.P.C. ..	—	3 5	1 0	0 2
105	lb.	Elixir viburn. prun. co. B.P.C.	—	3 11	1 1	0 2

Cost		Em—Et	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
7	gr.	Emetina *B*	per	gr.	1 2	—
7	gr.	Emetin. period	per	gr.	1 1	—
6	gr.	Emetinæ bismuthi iodidum *B*	per	gr.	0 11	—
6	gr.	Emetinæ hydrochloridum *B*	per	gr.	0 11	—
84	lb.	Emulsio benzyl benzoate	—	3 4	1 0	—
48	lb.	Emulsio bismuth et magnesiæ	—	2 2	0 8	—
15	lb.	Emulsio chloroformi B.P.C.	—	—	0 3	0 1
60	lb.	Emuls. iodoformi 10 per cent.	—	3 0	0 10	—
48	lb.	Emuls. menth. pip. B.P.C.	—	1 9	0 6	—
18	lb.	Emuls. olei morrhuæ B.P.C.	2 3	0 8	0 3	—
		Emuls. ol. morrh. 50% pkd.	℥ vj.	1 9	℥ xij.	3 0
27	lb.	Emuls. ol. morrh.c.hypoph.B.P.C.	3 6	1 0	—	—
51	lb.	Emuls. ol. morrh. pancr. B P.C.	6 6	2 0	0 7	—
56	lb.	Emuls. ol. morrh. pancr. et malti B.P.C.	7 2	2 3	0 7	—
28	lb.	Emuls. ol. olivæ B.P.C.	3 10	1 2	—	—
66	lb.	Emuls. ol. olivæ co. B.P.C.	9 0	2 7	—	—
21	lb.	Emuls. petrolei (agar)	2 6	0 9	—	—
18	lb.	Emuls. petrolei c. agar N.I.F.	2 4	0 9	0 3	—
18	lb.	Emuls. petr. agar phenolphthal. N.I.F.	2 4	0 9	0 3	—
21	lb.	Emuls. petr. phenolphthal.(agar)	2 6	0 9	—	—
18	lb.	Emuls. petr. c. hypoph. B.P.C.	2 0	0 7	0 2	—
144	doz.	Emuls. petrolei pkd.	—	1 6	℥ viij.	1 9
24	dr.	Ephedrina alk. *B*	per	gr.	0 2	3 6
18	dr.	Ephedrinæ hydrochloridum *B*	per	gr.	0 2	2 8
18	dr.	Ephedrine sulphas *B*	per	gr.	0 2	2 8
10	oz.	Ergota preparata *B*	—	—	1 6	0 3
108	.1 gm.	Ergotoxin ethanesulph. *B*	0 4	for	0.1	gm.
60	.1 gm.	Ergotoxin phosph. *B*	0 3	for	0.1	gm.
90	4 oz.	Ernutin *B*	—	—	2 10	0 6
51	dr.	Erythrityl tet. dil.	per	gr.	0 3	—
102	dr.	Erythrol tetranitras	per	gr.	0 5	—
21	lb.	Esbachs solution	—	0 10	0 3	—
42	oz.	Ess. ambræ griseæ	—	—	6 2	1 0
24	oz.	Ess. amygdalæ 1 in 16	—	—	3 6	0 6
24	oz.	Ess. anisi 1 in 5	—	—	3 6	0 6
28	oz.	Ess. apricot	—	—	3 10	0 8
114	lb.	Ess. camphoræ B.P.C.	—	3 9	1 0	—
13	oz.	Ess. cherry, fruit	—	—	2 0	0 4
30	oz.	Ess. cinnamomi	—	—	4 5	0 9
78	lb.	Ess. cinnam. et quin. P.L.F.	—	2 9	0 9	—
27	oz.	Ess. fridis	—	4 0	—	0 7
246	lb.	Ess. limonis (soluble)	—	9 0	2 6	0 4
456	lb.	Ess. menth. pip. (Ang.) 1 in 5	—	—	3 6	0 7
336	lb.	Ess. menth. pip. (Ang.) 1 in 10	—	—	3 1	0 6
252	lb.	Ess. menth. pip. (exot.) 1 in 10	—	8 6	2 4	0 4
51	oz.	Ess. moschi	—	—	7 5	1 2
75	oz.	Ess. moschi fort.	—	—	10 2	1 6
16	oz.	Ess. pear (jargonelle)	—	—	2 9	0 6
22	oz.	Ess. pineapple	—	—	2 4	0 4
96	lb.	Ess. pulegii 1 in 10	—	3 5	1 0	0 2
14	oz.	Ess. raspberry (fruit)	—	—	2 0	0 4
14	lb.	Ess. rennet	1 9	0 7	0 3	—
17	oz.	Ess. strawberry	—	—	2 6	0 5
24	oz.	Ess. vanillæ P.L.F.	—	—	3 6	0 6
36	oz.	Ess. vanillæ fort.	—	—	5 3	0 9
14	oz.	Ess. vanillæ (isoprop.)	—	—	2 0	0 4
18	oz.	Ess. vanillin P.L.F.	—	—	2 8	0 5
87	lb.	Ess. zingiberis	9 10	2 10	0 9	0 2
42	oz.	Estoral	—	—	5 3	1 0
10	oz.	Ethyl bromidum	—	—	—	0 6
74	50 cc.	Ethyl chaulmoogras	per cc.	0 3	—	—
31	ea.	Ethyl chloridum (30 c.c.)	ea.	4 0	—	—
42	ea.	Ethyl chloridum (50 c.c.)	ea.	5 3	—	—
74	50 cc.	Ethyl hydnocarpas	per c.c.	0 3	—	—
31	oz.	Ethyl iodidum	—	—	—	1 4
72	dr.	Ethyl morphinæ hydrochl. *B*	per	gr.	0 4	—

Cost		Et—Ex	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
74	50 cc.	Ethyl morrhuas	per	c.c.	0 3	—
5	oz.	Ethyl phthalate	—	—	0 9	0 2
96	oz.	Eucainæ hyd. (beta)	—	—	—	2 4
96	oz.	Eucainæ lact. (beta)	—	—	—	2 4
20	lb.	Eucalypti folia Ang.	2 6	0 9	0 3	—
24	lb.	Eucalypti fol. pulv.	3 0	0 11	0 3	—
7	oz.	Eucalyptol	—	—	1 1	0 2
50	oz.	Eugallol	—	—	6 0	1 2
12	oz.	Eugenol	—	—	1 9	0 3
36	oz.	Euonyminum virid.	—	—	5 3	0 9
16	lb.	Eupad	2 0	0 8	0 3	—
36	lb.	Euphorbii gummi pulvis	—	1 4	0 5	—
192	oz.	Euquinine	—	—	—	4 7
45	oz.	Euresol	—	—	—	1 1
22.4	amp.	Evipan sodium *B*	—	2 6	per	amp.
		Extracta				
21	oz.	Ext. aconiti radicis alc. *B*	—	—	3 2	0 6
11	oz.	Ext. adonis vernalis liq.	—	—	1 8	0 3
51	lb.	Ext. agropyri liquidum	—	2 0	0 8	0 2
108	lb.	Ext. aletridis liquidum B.P.C.	—	4 0	1 1	0 2
54	lb.	Ext. aloes pulvis	—	2 0	0 7	0 1
36	oz.	Ext. aloes Barbadensis glac.	—	—	4 6	0 11
9	oz.	Ext. aloes Socotrinæ pulvis	—	—	1 9	0 3
24	oz.	Ext. anthemidis pulvis '98	—	—	3 1	0 6
14	oz.	Ext. apocyni liquidum	—	—	2 0	0 4
150	lb.	Ext. arnica liq.	—	5 5	1 7	0 3
60	lb.	Ext. belæ liquidum	—	2 2	0 8	0 2
12	oz.	Ext. belladonnæ siccum *B*	—	—	1 9	0 3
108	lb.	Ext. belladonnæ liquidum *B*	—	4 6	1 4	0 3
102	lb.	Ext. belladonnæ viride '98 *B*	—	3 9	1 0	0 2
13	oz.	Ext. belladonnæ viridis pulv. '98 *B*	—	—	1 11	0 4
13	oz.	Ext. boldo liquidum	—	—	1 10	0 4
36	oz.	Ext. bone marrow	—	—	4 6	0 11
24	oz.	Ext. buchu	—	—	3 6	0 6
132	lb.	Ext. buchu liquidum B.P.C.	—	5 2	1 7	0 3
15	oz.	Ext. cacti grandiflori liquidum	—	—	2 3	0 4
39	oz.	Ext. calendulæ	—	—	5 9	0 10
14	oz.	Ext. calendula liq.	—	—	2 2	0 4
15	oz.	Ext. calumbæ	—	—	2 3	0 4
60	dr.	Ext. cannabis indicæ *B, F*	—	—	—	8 9
108	lb.	Ext. cascaræ sag. sicci pulvis	—	3 10	1 1	0 2
30	lb.	Ext. cascaræ sag. liquidum	3 9	1 1	0 4	0 1
51	lb.	Ext. cascaræ sag. liquidum insip.	6 4	1 11	0 7	0 1
114	lb.	Ext. caulophylli liquidum	—	4 2	1 2	0 2
8	oz.	Ext. cinchonæ	—	—	1 2	0 2
60	lb.	Ext. cinchonæ liquidum	—	2 4	0 8	0 2
144	lb.	Ext. cocæ liquidum *B, F*	—	5 6	1 7	0 3
24	oz.	Ext. colchici aceticum *C*	—	—	3 6	0 8
11	oz.	Ext. colchici liq. *C*	—	—	1 8	0 3
30	oz.	Ext. colchici sicc. *C*	—	—	4 5	0 8
30	oz.	Ext. colchici sem. acet. *C*	—	—	4 5	0 8
10	oz.	Ext. collinsonia liq.	—	—	1 6	0 3
16	oz.	Ext. colocynthidis pulvis	—	—	2 4	0 4
6	oz.	Ext. colocynthidis co.	—	—	1 0	0 2
99	lb.	Ext. condurango liquidum	—	3 7	1 0	0 2
8	oz.	Ext. conii *C*	—	—	1 2	0 2
11	oz.	Ext. conii liquidum *C*	—	—	1 8	0 3
18	oz.	Ext. convallariæ liquidum	—	—	2 8	0 5
14	oz.	Ext. coto liquidum	—	—	2 0	0 4
22	oz.	Ext. damianæ pulvis	—	—	3 3	0 7
120	lb.	Ext. damianæ liquidum	—	4 3	1 2	0 2
18	oz.	Ext. droseræ rotund. liquidum	—	—	2 8	0 5
30	oz.	Ext. ergotæ *B*	—	—	4 5	0 8
36	oz.	Ext. ergotæ pulvis *B*	—	—	5 3	0 9
84	lb.	Ext. ergot. liq. *B*	—	3 0	0 10	0 2
66	lb.	Ext. ergotæ liquidum '14 *B*	—	2 6	0 8	0 2
102	lb.	Ext. ergotæ ammon. liq. *B*	—	3 9	1 1	0 2

Cost		Ex	Selling Price			
d.	per	Extracta—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
30	oz.	Ext. euonymi	—	—	4 5	0 8
76	lb.	Ext. euphorbiæ liquidum	—	2 10	0 10	0 2
14	oz.	Ext. fellis bovinum	—	—	2 0	0 4
16	oz.	Ext. fellis bovinum pulv.	—	—	2 4	0 4
10	oz.	Ext. filicis	—	—	1 6	0 3
9	oz.	Ext. fuci B.P.C. pulv.	—	—	1 4	0 3
60	lb.	Ext. fuci liquidum	7 6	2 2	0 8	0 2
12	oz.	Ext. fuci pulvis	—	—	1 9	0 3
30	oz.	Ext. gelsemii alcoh. *C*	—	—	4 5	0 8
38	lb.	Ext. gentianæ	—	1 4	0 5	0 1
66	lb.	Ext. gentianæ pulvis	—	2 5	0 9	0 2
54	lb.	Ext. glycyrrhizæ	—	2 0	0 7	0 1
26	lb.	Ext. glycyrrhizæ liquidum	—	1 0	0 4	0 1
102	lb.	Ext. gossypii rad. cort. liquidum	—	3 7	1 2	0 2
93	lb.	Ext. granati rad. cort. liquidum	—	3 4	0 11	0 2
72	lb.	Ext. grindeliæ liquidum	—	2 9	0 10	0 2
21	lb.	Ext. hæmatox. exot.	—	0 10	0 3	0 1
36	lb.	Ext. hæmatox. pulvis	—	1 4	0 5	0 1
16	oz.	Ext. hamamelidis (fol.)	—	—	2 4	0 4
72	lb.	Ext. hamamelidis liquidum	9 0	2 7	0 9	0 2
12	oz.	Ext. hellebor. nig.	—	—	1 9	0 3
79	—	Ext. hepatis siccum	9s.	for	3	tubes
168	lb.	Ext. hepat. liq.	—	6 0	—	—
75	oz.	Ext. hydrastis siccum *C*	—	—	—	1 7
22	oz.	Ext. hydrastis liquidum *C*	—	—	3 3	0 6
11	oz.	Ext. hyoscyam. liq.	—	—	1 9	0 3
18	oz.	Ext. hyoscyami siccum *C*	—	—	2 8	0 5
20	oz.	Ext. hyoscyami viridis pulvis *C*	—	—	2 11	0 5
19	oz.	Ext. ipecacuanhæ liquidum *C*	—	—	2 10	0 5
15	oz.	Ext. iridis sicc. B.P.C.	—	—	2 3	0 4
21	oz.	Ext. jaborandi	—	—	3 1	0 6
84	lb.	Ext. jaborandi liq.	—	3 0	0 10	0 2
22	oz.	Ext. jalapæ pulvis	—	—	3 3	0 6
132	lb.	Ext. kavæ liquidum	—	4 10	1 4	0 3
81	lb.	Ext. kolæ liquidum	—	2 11	0 11	0 2
22	oz.	Ext. krameriæ pulvis	—	—	3 3	0 6
17	oz.	Ext. lactucæ pulvis	—	—	2 2	0 5
18	oz.	Ext. lupuli pulvis	—	—	2 8	0 5
10	lb.	Ext. malti	1 4	—	—	—
14	lb.	Ext. malti ferratum	1 10	0 7	—	—
26	lb.	Ext. malti c. cascar. sag. wgt.	3 3	1 0	—	—
21	lb.	Ext. malti c. glycerophos. wgt.	2 8	0 11	—	—
24	lb.	Ext. malti c. hæmoglobin. wgt.	3 0	1 0	—	—
22	lb.	Ext. malti c. hypophosph. wgt.	2 9	1 0	—	—
12	lb.	Ext. malti c. ol. morrh. B.P.C.	1 6	—	—	—
44	doz.	Ext. malti c. oleo morrh. pkd.	1 6		2-lb.	2 6
14	lb.	Ext. malti c. syr. fer. phos. co. wgt.	1 10	0 7	—	—
16	lb.	Ext. malti liquidum	2 8	1 0	0 3	—
27	lb.	Ext. malti liq. c. casc. sag.	—	1 3	0 5	—
33	lb.	Ext. malti liq. c. glyceroph. *C*	4 3	1 4	0 5	—
30	lb.	Ext. malti liq. c. hæmoglob.	3 9	1 2	0 4	—
30	lb.	Ext. malti liq. c. hypophos. *C*	3 9	1 2	0 4	—
26	lb.	Ext. malti liq. c. syr. East. *C*	3 6	1 1	0 4	—
20	lb.	Ext. malti liq. c.syr. ferriphos. co.	2 9	0 11	0 3	—
69	lb.	Ext. marubii liquidum	—	2 7	0 9	0 2
13	oz.	Ext. maticæ liq.	—	—	2 0	0 4
60	lb.	Ext. medullæ rubræ liquidum	—	2 3	0 8	0 2
10	oz.	Ext. nucis vomicæ siccum *B*	—	—	1 6	0 3
63	lb.	Ext. nucis vomicæ liquidum *B*	—	2 4	0 8	0 2
60	lb.	Ext. opii liquidum *B, F*	—	2 2	0 8	0 2
63	oz.	Ext. opii siccum *B, F*	—	—	—	1 4
60	lb.	Ext. papaveris liquidum *C*	—	2 2	0 8	0 2
72	lb.	Ext. pareiræ liquidum	—	2 7	0 9	0 2
51	oz.	Ext. physostigmatis	—	—	7 5	1 1
13	oz.	Ext. picrorhizæ liquidum	—	—	2 0	0 4
9	oz.	Ext. pini canadensis liquidum	—	—	1 4	0 3
22	lb.	Ext. pini (for baths)	2 9	0 10	0 3	—

Cost		Ex—Fe	Selling Price			
d.	per	Extracta—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
11	oz.	Ext. pulsatillæ liquidum	—	—	1 8	0 3
126	lb.	Ext. pyrethri rad liq.	—	4 7	1 4	0 3
20	oz.	Ext. quassiæ pulvis	—	—	2 11	0 6
44	lb.	Ext. quassiæ liq.	—	1 7	0 6	0 1
66	lb.	Ext. quillaiæ liquidum	—	2 6	0 9	0 2
12	oz.	Ext. rhamni frang. liquidum	—	—	1 9	0 3
15	oz.	Ext. rhei pulvis	—	—	2 2	0 4
11	oz.	Ext. rhus. arom. liquidum	—	—	1 8	0 3
14	oz.	Ext. rhus. toxicod. liquidum	—	—	2 0	0 4
27	oz.	Ext. rutæ	—	—	4 0	0 9
13	oz.	Ext. sabal liq.	—	—	2 0	0 4
102	lb.	Ext. salicis nigræ liquidum	—	3 9	1 1	0 2
15	oz.	Ext. sarsæ Jam. simp.	—	—	2 3	0 4
13	oz.	Ext. sarsæ Jam. co.	—	—	1 11	0 4
8	oz.	Ext. scillæ liquidum	—	—	1 2	0 2
87	lb.	Ext. senegæ liquidum	—	—	0 10	0 2
36	lb.	Ext. sennæ liquidum	—	1 6	0 6	0 1
16	oz.	Ext. serpentariæ liq.	—	—	2 4	0 4
20	oz.	Ext. stramonii foliæ	—	—	2 11	0 6
33	oz.	Ext. stramonii sem.	—	—	4 10	0 8
24	oz.	Ext. strophanthi *C*	—	—	3 6	0 6
30	oz.	Ext. sumbul	—	—	—	0 8
54	lb.	Ext. taraxaci	—	2 0	0 7	0 1
66	lb.	Ext. taraxaci pulvis	—	2 5	0 10	0 2
6	oz.	Ext. uvæ ursi liq.	—	—	0 11	0 2
18	oz.	Ext. valerianæ pulvis	—	—	2 8	0 5
39	oz.	Ext. viburni prunifolii	—	—	5 9	1 10
102	lb.	Ext. viburni liquidum	—	3 8	1 0	0 2
		F				
30	lb.	Fehling's solution No. 1	—	1 6	0 5	—
30	lb.	Fehling's solution No. 2	—	1 6	0 5	—
		Ferrum				
21	oz.	Ferri albuminas	—	—	3 1	0 6
26	lb.	Ferri alum. pur.	3 3	1 0	0 4	—
8	oz.	Ferri arsenas *B*	—	—	1 2	0 2
56	oz.	Ferri cacodylas *B*	—	—	—	1 4
18	lb.	Ferri carbonas saccharatus	2 3	0 8	0 3	—
8	oz.	Ferri citras	—	—	1 2	0 2
36	lb.	Ferri et ammonii citras	—	1 4	0 5	0 1
54	lb.	Ferri et ammonii citras vir.	—	2 0	0 7	0 1
6	oz.	Ferri et ammonii tartras	—	—	0 11	0 2
16	oz.	Ferri et bismuthi citras	—	—	2 4	0 4
11	oz.	Ferri et mangan. citras	—	—	1 8	0 3
10	oz.	Ferri et mang. phosphas	—	—	1 6	0 3
6	oz.	Ferri et potassii tartras	—	—	0 11	0 2
19	oz.	Ferri et quininæ citras	—	—	2 10	0 5
30	oz.	Ferri et quin. cit. c. strych. *B*	—	—	4 1	0 7
14	oz.	Ferri et strych. citras *B*	—	—	1 9	0 3
12	oz.	Ferri glycerophosphatis pulvis	—	—	1 9	0 3
13	oz.	Ferri hypophosphis	—	—	1 11	0 4
18	oz.	Ferri iodidum	—	—	2 8	0 5
10	oz.	Ferri lactas	—	—	1 6	0 3
18	oz.	Ferri lactophosphas	—	—	3 0	0 6
11	lb.	Ferri limat.	1 5	0 6	0 2	—
30	lb.	Ferri nitras	—	1 2	0 4	—
48	lb.	Ferri oleas	—	2 0	0 7	0 1
4	oz.	Ferri oxalas (ferric)	—	—	0 7	0 1
12	lb.	Ferri oxidum præcipitatum rubrum	1 6	0 6	0 2	—
30	lb.	Ferri oxidum sacch. B.P.C.	—	1 2	0 4	—
12	lb.	Ferri perchloridum cryst.	1 9	0 5	0 2	—

Cost		Fe—Gl	Selling Price			
d.	per	Ferrum—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
33	lb.	Ferri phosphas saccharatus ..	—	1 3	0 5	—
5	oz.	Ferri phosphas solubilis ..	—	—	0 11	0 2
7	oz.	Ferri pyrophosphas	—	—	1 1	0 2
14	oz.	Ferri salicylas	—	—	2 0	0 4
15	oz.	Ferri succinas	—	—	2 3	0 4
7	lb.	Ferri sulphas pur.	0 11	0 3	0 1	—
7	lb.	Ferri sulphas pur. granulatus ..	0 11	0 3	0 1	—
14	lb.	Ferri sulphas exsiccatus ..	1 9	0 7	0 2	—
4	lb.	Ferri sulphas coml.	0 6	0 2	—	—
8	lb.	Ferri sulphidum (cake) ..	1 0	0 4	0 2	—
16	oz.	Ferri valerianas	—	—	2 4	0 4
16	oz.	Ferrier's snuff P.L.F. .. *B, F*	—	—	2 6	0 6
31.5	8 oz.	Ferro-malt (Crookes)	—	2 0	0 6	—
36	8 oz.	Ferro-malt glycerophos. *C*	—	2 3	0 7	0 1
43	oz.	Ferropyrin	—	—	—	1 0
6	oz.	Ferrum redactum	—	—	0 11	0 2
21	oz.	Fluorescein technical	—	—	3 1	0 6
36	oz.	Fluorescein solubile	—	—	5 3	0 9
17	lb.	Fœniculi pulvis	2 2	0 7	0 2	—
15	lb.	Fœniculi pulvis (coarse) ..	1 10	0 7	0 2	—
8	lb.	Fœnugreci sem. pulvis	1 0	0 3	—	—
7	lb.	Fœnugreci sem. pulvis (crs.) ..	0 11	0 3	—	—
570	cwt.	Fœnugreci sem. pulvis (crs.) ..	0 9	—	7 lb.	4 6
16	oz.	Formamol	—	—	2 4	0 4
10	3 oz.	Formolyptol, unstd.	—	—	0 5	—
22	lb.	Foot powder, antisep. P.L.F. ..	2 9	1 0	0 4	—
8	lb.	Foot-rot paste P.L.F.	1 0	0 4	—	—
74	lb.	Foot-rot powder P.L.F. ..	9 3	2 6	—	—
54	lb.	Frosting	6 9	2 0	0 7	—
26	oz.	Fuchsinum pur.	—	—	3 9	0 7
5	lb.	Fuller's earth	0 8	0 3	—	—
6	lb.	Fuller's earth pulvis	0 9	0 3	—	—
7	lb.	Fuller's earth levig.	0 11	0 4	—	—
7	lb.	Fuller's earth levig. alb. ..	0 11	0 4	—	—
		G				
32	oz.	Galactosum	—	—	4 8	0 8
12	lb.	Galangalæ rhizoma	1 8	0 6	0 2	—
7	oz.	Galbani pulvis	—	—	1 2	0 2
27	lb.	Gallæ cærul.	3 6	1 0	0 4	—
36	lb.	Gallæ cærul. pulvis	4 6	1 4	0 5	—
18	25	Gardan tablets	per	bot.	2 6	—
72	lb.	Gelatinum sheet No. 1 ..	8 6	2 5	0 8	—
84	lb.	Gelatinum incisum	10 6	3 0	0 10	—
102	lb.	Gelatum codeinæ et glyc. P.L.F.	—	3 9	1 0	—
20	lb.	Gelatum zinci	2 6	0 9	—	—
30	lb.	Gelat. zinci dur. P.L.F. ..	3 9	1 2	—	—
18	gr.	Gelseminæ hydrochloridum *B*	per	gr.	2 8	—
15	lb.	Gentianæ rad. incis.	2 0	0 7	0 2	—
17	lb.	Gentianæ rad. pulvis	2 3	0 8	0 3	—
598	cwt.	Gentianæ rad. pulvis (crs.) ..	7 lb.	4 8	14 lb.	9 0
18	oz.	Geraniol	—	—	2 8	0 5
20	oz.	Geraniol acetas	—	—	3 0	0 6
22	oz.	Gingerin. (African)	—	—	3 3	0 6
54	oz.	Gingerin. (Jam.)	—	—	7 11	1 2
7	lb.	Glucosum (liq.) .. .. wgt.	1 0	0 4	0 2	—
8	lb.	Glucosum (solid)	1 0	0 4	0 2	—
2	lb.	Glucosum pulv.	1 6	0 6	0 2	—
36	lb.	Glue, surg. (Sinclair) P.L.F. ..	4 6	1 2	—	—
		Glycerina				
84	lb.	Glycerin bismuth carb. ..	—	4 4	1 2	0 2
50	lb.	Glycerin pepsin fort.	—	2 7	0 9	0 2
20	lb.	Glycerin phenolis	—	1 2	0 4	0 1
12	lb.	Glycerinum	2 1	0 7	0 3	—
12	lb.	Glycerinum (wgt.)	1 6	0 6	—	—
22	lb.	Glyc. acidi borici	3 6	1 0	0 4	—

Cost		Gl—He	Selling Price			
d.	per	Glycerina—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
38	lb.	Glyc. acidi gallici	—	1 9	0 6	0 1
86	8 oz.	Glyc. ac. pepsin (Bullock) ..	—	6 0	1 7	0 4
28	lb.	Glyc. acidi tannici	—	1 5	0 5	0 1
24	lb.	Glyc. aluminis	—	1 2	0 4	—
33	lb.	Glyc. amyli	—	1 3	0 5	—
44	lb.	Glyc. atropinæ .. .. *B*	—	2 6	0 8	—
54	lb.	Glyc. bellad. 50 per cent. *B*	10 2	2 6	0 9	—
60	lb.	Glyc. bellad.	—	2 8	0 9	—
16	lb.	Glyc. boracis	—	0 11	0 3	—
72	lb.	Glyc. carminini B.P.C. ..	—	3 11	1 2	—
28	lb.	Glyc. diamorphinæ B.P.C. *B, F*	—	1 9	0 6	—
34	lb.	Glyc. Eastoni .. .. *C*	—	1 9	0 6	0 1
26	lb.	Glyc. et cucum.	—	1 0	0 4	—
14	lb.	Glyc. et aqua rosæ 1 in 3 ..	2 0	0 7	0 2	—
30	lb.	Glyc. glycerophosphatum co. *C*	—	1 5	0 5	—
24	lb.	Glyc. ichthamol.	—	1 3	0 5	0 1
6	oz.	Glyc. iodi B.P.C.	—	—	1 9	—
51	lb.	Glyc. pancreatini	—	1 9	0 7	0 1
84	lb.	Glyc. papaini	—	3 6	1 0	0 2
34	lb.	Glyc. pepsini	—	1 9	0 6	0 1
26	lb.	Glyc. plumbi subacetatis ..	—	1 6	0 6	0 1
11	lb.	Glyc. thymolis co.	1 6	0 6	0 2	—
54	lb.	Glyc. tragacanthæ	—	1 10	0 7	0 1
30	oz.	Glycine	—	—	4 5	0 8
33	lb.	Glycothymoline, unstd. ..	—	1 3	0 4	—
24	lb.	Glycyrrhizæ radix decort. ..	3 0	1 0	0 4	—
12	lb.	Glycyrrhizæ radicis pulvis ..	1 6	0 6	0 2	—
28	lb.	Glycyrrhizæ radicis decort. pulv.	3 6	1 0	0 4	—
10	lb.	Glycyrrhizæ radicis pulvis (crs.)	1 3	0 5	0 2	—
560	cwt.	Glycyrrhizæ radicis pulvis (crs.)	7 lb.	4 2	14 lb.	7 9
16	oz.	Glycyrrhizinum ammoniatum ..	—	—	2 4	0 4
54	lb.	Gossypii radicis cort. pulvis ..	—	2 0	0 7	—
21	lb.	Gran. paradisi pulv.	2 8	0 9	0 3	—
17	lb.	Granati cortex	—	0 8	0 3	—
27	lb.	Granati radicis cortex	—	1 0	0 4	—
35	4 oz.	Grindeline (Oppenheimer) ..	—	4 4	1 2	0 3
7	lb.	Guaiaci ligni rass.	0 11	0 4	0 1	—
5	oz.	Guaiaci resinæ pulvis	—	—	0 9	0 2
20	oz.	Guaiacol (cryst.)	—	—	3 0	0 5
18	oz.	Guaiacol	—	—	2 8	0 5
30	oz.	Guaiacol. benzoas	—	—	4 5	0 8
19	oz.	Guaiacol. carbonas	—	—	2 10	0 5
48	oz.	Guaiacol. cinnamas	—	—	7 0	1 0
108	oz.	Guaiacol. salicylas	—	—	—	2 4
8	oz.	Guaranæ pulvis	—	—	1 2	0 2
9	oz.	Guttæ fluorescinæ B.P.C. ..	—	—	1 4	0 3
		H				
8	lb.	Hæmatox. lignum incis. ..	1 0	0 4	0 1	—
13	lb.	Hæmatox. ligni pulvis	1 8	0 7	0 2	—
19	dr.	Hæmatoxylinum	—	—	—	2 10
8	oz.	Hæmoglobini pulvis	—	—	1 2	0 2
90	lb.	Hæmorrhaline (Hewlett) ..	—	3 3	0 11	0 2
33.6	10c.c.	Halibut liver oil	4 0	each	—	—
33.5	box25	Haliverol capsules ♏3 P.D. ..	4 0	each	—	—
302	doz.	Haliverol (P.D. & Co.) ..	—	—	5 c.c.	3 0
21	oz.	Hamamelinum	—	—	3 1	0 6
30	10 v.	Hebaral sodium P.D. gr. 3 ..	3 3	each	—	—
12	oz.	Heliotropin. cryst.	—	—	1 10	0 4
22	lb.	Hellebori nigri radicis pulvis ..	2 9	0 10	0 3	—
40	oz.	Helmitol	—	—	—	0 11
14	lb.	Hennæ folia	1 9	0 7	0 2	—
17	lb.	Hennæ fol. pulvis	2 3	0 8	0 3	—
18	oz.	Hexamin benzoas.	—	—	2 8	0 5
18	oz.	Hexamin salicylas	—	—	2 8	0 5
5	oz.	Hexamina	—	—	0 9	0 2

Cost		He—In	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
24	oz.	Hexamina resorcin.	—	—	3 6	0 8
12	oz.	Hexamin. sodii acet.	—	—	1 9	0 3
90	doz.	Hirudines	ea.	1 2	—	—
5	gr.	Homatropina *B*	per	gr.	0 9	—
5	gr.	Homatrop. hydrobrom. *B*	per	gr.	0 9	—
22	lb.	Hoof ointment P.L.F. I.	2 9	—	—	—
21	lb.	Hoof ointment P.L.F. II.	2 8	—	—	—
5	lb.	Hordeum perlatum	0 8	0 3	0 1	—
70	100	Hormotone tablets	per	doz.	1 3	—
		Hydrargyrum				
68	lb.	Hyd. bisulphidum (cinnabar)	20 6	5 11	1 9	—
02	lb.	Hyd. bisulph. (vermilion)	12 9	3 8	1 0	—
14	oz.	Hyd. bromidum	—	—	2 0	0 4
24	oz.	Hyd. cyanidum *B*	—	—	3 6	0 6
19	oz.	Hyd. iodidum flavum *C*	—	—	2 10	0 5
15	oz.	Hyd. iodidum rubrum *C*	—	—	2 3	0 4
18	oz.	Hyd. iodidum viride	—	—	2 8	0 5
54	lb.	Hyd. oleas	—	2 0	0 7	0 1
14	lb.	Hyd. oxidum flavum *C*	—	—	1 2	0 2
26	lb.	Hyd. oxidum rubrum *C*	—	—	1 3	0 3
18	oz.	Hyd. oxycyanidum *B*	—	—	2 8	0 5
96	lb.	Hyd. perchloridum *B*	—	—	1 0	0 2
14	lb.	Hyd. persulphas (alb.)	—	4 1	1 1	0 2
22	oz.	Hyd. salicylas	—	—	3 3	0 6
08	lb.	Hyd. subchloridum	—	—	1 1	0 2
11	oz.	Hyd. subchl. præc. subtil.	—	—	1 8	0 3
44	lb.	Hyd. subsulphas flavus	—	5 2	1 6	0 3
11	lb.	Hyd. sulphuretum c. sulphure	—	4 0	1 1	0 2
18	oz.	Hyd. sulphocyanidum *C*	—	—	2 8	0 5
23	oz.	Hyd. tannas	—	—	3 5	0 7
81	lb.	Hydrargyrum	10 3	3 0	0 10	—
11	lb.	Hyd. ammoniatum *C*	—	4 0	1 1	0 2
38	lb.	Hyd. cum creta	—	1 5	0 5	0 1
8	gr.	Hydrastina *B*	per	gr.	1 2	—
8	gr.	Hydrastininæ hydrochlor. *B*	per	gr.	1 2	—
63	16 oz.	Hydrated bismuth (P.D.)	—	2 5	0 9	0 2
21	16 oz.	Hydrated magnesia (P.D.)	2 6	1 0	0 3	—
84	lb.	Hydroquinone	—	2 9	0 9	0 2
7	gr.	Hyoscinæ hydrobrom. *B*	per	gr.	1 2	—
27	lb.	Hyoscyami semina	—	1 0	0 4	—
5	gr.	Hyoscyamina cryst. *B*	per	gr.	0 10	—
5	gr.	Hyoscyaminæ sulphas *B*	per	gr.	0 10	—
		I				
43	oz.	Ichthalbin	—	—	—	1 0
20	30	Ichthalbin tablets gr. 5	doz.	1 2	—	—
40	lb.	Ichthammol	—	1 5	0 5	0 1
72	lb.	Ichthyocolla Brazil. incis.	9 0	2 7	0 9	0 2
14	lb.	Ichthyol	—	4 2	1 2	0 2
5.6	amp.	Icoral 0.5%	0 10	per	amp.	—
7.3	amp.	Icoral 5 0%	1 0	per	amp.	—
51	lb.	Incense P.L F.	6 5	1 10	—	—
42	oz.	Indicarminum	—	—	6 4	1 0
22	oz.	Indigo synthetic	—	—	3 3	0 6
24	oz.	Indigo (carmine dry)	—	—	3 6	0 6
42	lb.	Indigo (carmine paste)	—	1 6	0 5	—
40	lb.	Indigo sulphatis sol.	—	1 5	0 5	—
12	lb.	Infusa recenta	1 6	0 6	0 2	—
		Infusa Concentrata 1—7				
37	lb.	Inf. agropyri conc.	—	1 5	0 5	0 1
51	lb.	Inf. anthemidis conc.	—	1 10	0 7	0 1

Cost		In—Ir	Selling Price			
d.	per	**Infusa**—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
21	lb.	Inf. amarum conc.	—	0 11	0 4	0 1
36	lb.	Infus. aromat co.	—	1 6	0 6	0 1
36	lb.	Inf. aurantii conc.	—	1 4	0 5	0 1
36	lb.	Inf. aurantii co. conc.	—	1 4	0 5	0 1
39	lb.	Inf. buchu conc.	—	1 5	0 6	0 1
24	lb.	Inf. calumbæ conc.	—	1 0	0 4	0 1
27	lb.	Inf. caryophylli conc.	—	1 0	0 4	0 1
60	lb.	Inf. cascarillæ conc.	—	2 2	0 7	0 1
45	lb.	Inf. catechu conc.	—	1 8	0 7	0 1
30	lb.	Inf. chiratæ conc.	—	1 5	0 5	0 1
42	lb.	Inf. cinchonæ acid. conc.	—	1 7	0 7	0 1
45	lb.	Inf. cinchonæ flav. conc.	—	1 10	0 7	0 1
60	lb.	Inf. cinchonæ pallid. conc.	—	2 2	0 7	0 1
45	lb.	Inf. cuspariæ conc.	—	1 8	0 6	0 1
43	lb.	Inf. dulcamaræ conc.	—	1 8	0 6	0 1
69	lb.	Inf. ergotæ conc. *B*	—	2 6	0 9	0 2
25	lb.	Inf. gentianæ (simp.) conc.	—	1 0	0 4	0 1
30	lb.	Inf. gentianæ co. conc.	—	1 1	0 4	0 1
39	lb.	Inf. jaborandi conc. *C*	—	1 5	0 6	0 1
33	lb.	Inf. krameriæ conc.	—	1 4	0 5	0 1
56	lb.	Inf. lupuli conc.	—	2 0	0 7	0 1
44	lb.	Inf. marubii conc.	—	1 9	0 6	—
45	lb.	Inf. maticæ conc.	—	1 10	0 7	0 1
40	lb.	Inf. pruni serot. conc. *C*	—	1 5	0 6	0 1
21	lb.	Inf. quassiæ conc.	—	0 10	0 3	0 1
38	lb.	Inf. rhei conc.	—	1 6	0 6	0 1
48	lb.	Inf. rosæ acidum conc.	—	1 9	0 5	0 1
30	lb.	Inf. scoparii conc.	—	1 1	0 5	0 1
38	lb.	Inf. senegæ conc.	—	1 5	0 5	0 1
36	lb.	Inf. sennæ conc.	—	1 4	0 5	0 1
68	lb.	Inf. serpentariæ conc.	—	2 7	0 9	0 2
45	lb.	Inf. simarubæ conc.	—	1 8	0 6	0 1
30	lb.	Inf. uvæ ursi conc.	—	1 2	0 4	0 1
32	lb.	Inf. valerianæ conc.	—	1 2	0 4	0 1
		Injectiones				
23	oz.	Inject. apomorphinæ hypod. *C*	—	—	3 10	0 7
32	oz.	Inject. cocainæ hypod. *B, F*	—	—	4 8	0 8
48	oz.	Inject. coc. hyp. (10%) *B, F*	—	—	7 0	1 0
28	oz.	Inject. morphinæ hypod. *B, F*	—	—	5 0	0 9
6	oz.	Inject. strychninæ hypod. *B*	—	—	1 0	0 2
32	lb.	Insect powder (Dalm.)	4 0	1 2	0 4	—
22	lb.	Insect powder sec.	2 9	0 9	0 3	—
13.5	ea.	Insulin 5 c.c.	orig.	bot.	1 6	—
25.5	ea.	Insulin 10 c.c.	orig.	bot.	2 10	—
28	lb.	Inulæ radicis pulvis	3 9	1 2	0 4	—
24	lb.	Inulæ radicis pulvis (crs.)	3 5	1 0	0 4	—
27	oz.	Inulin	—	—	4 0	0 7
15	oz.	Iodatol 10%	—	—	2 0	0 5
30	oz.	Iodatol 25%	—	—	3 9	0 9
90	lb.	Iodine, alcoholic sol. (Factory)	—	2 10	0 9	—
117	100 gm.	Iodipin 10%	—	—	—	0 9
96	oz.	Iodival	—	—	—	2 4
13	oz.	Iodoformum	—	—	2 0	0 4
108	lb.	Iodoform varnish (Whitehead's)	—	4 0	1 3	—
54	20	Iodothyrine tablets gr. 3	doz.	4 0	—	—
10	oz.	Iodum resubl.	—	—	1 6	0 3
38	oz.	Iononum 10%	—	—	5 7	0 10
15	oz.	Ipecac. pulverata	—	—	2 3	0 4
180	lb.	Ipecac. rad. (Rio) pulvis	—	6 5	1 11	—
16	lb.	Iridis rad. flor.	—	0 7	0 2	—
108	lb.	Iridis rad. flor. trimmed	—	4 0	1 1	—
20	lb.	Iridis rad. flor. pulv.	2 6	0 9	0 3	—
122	lb.	Iridis rad. flor. (fingers)	—	4 4	1 2	—

Cost d.	Cost per	Ja—Li	Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
		J				
18	lb.	Jaborandi fol. (P. microph.) ..	—	0 8	0 3	—
30	lb.	Jalap. pulverata	—	1 3	0 5	0 1
38	oz.	Jalapæ resinæ pulvis	—	—	5 7	0 10
48	oz.	Jalapin	—	—	7 0	1 0
9	lb.	Juniperi fructus	1 2	0 4	0 2	—
19	lb.	Juniperi fructus contus. ..	2 5	0 9	0 3	—
		K				
5	lb.	Kainit	0 8	0 3	—	—
5	oz.	Kamala (sifted)	—	—	0 9	—
18	lb.	Kaolinum puriss.	2 3	0 8	0 3	—
11	lb.	Kaolinum pur. pulvis	1 5	0 5	1 1	—
6	lb.	Kaolinum coml. pulvis opt. ..	0 9	0 3	—	—
68	dr.	Kerocain	per	gr.	0 3	8 6
25	50	Kerol caps. (intest.)	doz.	0 9	—	—
20.5	50	Kerol caps. (stom.)	doz.	0 8	—	—
8	lb.	Kieselguhr (alb.)	1 0	0 4	0 1½	—
7	lb.	Kieselguhr (grey)	0 11	0 4	0 1½	—
		L				
40	oz.	Lactopeptine, unstd.	—	—	5 3	1 0
70	lb.	Lactopept. elix., unstd. ..	8 9	2 3	0 7	0 1
40	oz.	Lactopept. tab. gr. 5, unstd. ..	doz.	0 10	—	—
17	lb.	Lactosum	2 2	0 8	0 3	—
9	dr.	Lactucarium	—	—	—	1 4
15	oz.	Lævulosum	—	—	2 3	0 4
28	lb.	Lambing oils P.L.F.	3 6	—	—	—
24	50	Lamellæ	3 6	per	tube	—
36	50	Lamella homatropin	4 6	per	tube	—
6	lb.	Lapis cariosi pulvis	0 9	0 3	0 1	—
11	oz.	Lapis divinus (sticks)	—	—	1 8	0 3
7	lb.	Lapis Hibern. pulvis	0 10	0 4	0 2	—
8	lb.	Lapis pumicis elect.	1 0	0 4	0 2	—
5	lb.	Lapis pumicis pulvis	0 8	0 3	0 1	—
7	lb.	Lapis pumicis pulvis levig. ..	1 0	0 4	0 2	—
18	lb.	Laricis cortex	—	0 9	0 2	—
30	lb.	Laricis corticis pulvis	—	1 1	0 4	—
14	lb.	Lauri fructus	—	0 6	0 2	—
18	lb.	Lauri fructus pulvis	—	0 8	0 3	—
144	lb.	Lavandulæ flores Ang.	—	5 2	1 6	0 3
39	lb.	Lavandulæ flores Gall. opt. ..	5 0	1 5	0 5	—
33	lb.	Lavandulæ flores Gall. sec. ..	4 2	1 3	0 5	—
42	oz.	Lecithin (ovo)	—	—	6 2	1 0
36	lb.	Leeming's ess. P.L.F.	4 6	1 4	—	—
48	oz.	Lenigallol	—	—	—	1 2
10	oz.	Leptandrinum	—	—	1 6	0 3
15	lb.	Ligroinum	—	0 6	0 2	—
72	lb.	Limonis cortex sicc. Ang. ..	—	2 7	0 9	0 2
36	lb.	Linctus diamorphinæ .. *B, F*	—	1 6	0 6	—
24	lb.	Linctus diamorphin. N.H.I. *B, F*	—	1 0	0 4	—
36	lb.	Linctus diamorph. camph. B.P.C. *C, ex F*	—	1 5	0 6	—
42	lb.	Linctus diamorph. c. ipecac. B.P.C. *C, ex F*	—	1 9	0 7	—
36	lb.	Linctus diamorph. et scillæ B.P.C. *C, ex F*	—	1 5	0 6	—
60	lb.	Linctus diamorph. et thymi B.P.C. *C, ex F*	—	2 2	0 8	—
36	lb.	Linctus ethylmorphin.	—	1 9	0 4	—
22	lb.	Linctus scillæ (Gee) .. *C*	3 0	0 11	0 3	—
28	lb.	Linctus simplex P.L.F. ..	—	1 4	0 5	—

Cost d.	Cost per	Li	Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
30	lb.	Linctus tussi P.L.F. .. *C*	5 0	1 6	0 5	—
480	cwt.	Lini semina	7 lb.	3 6	14 lb.	7 0
6	lb.	Lini semina Ang. sifted ..	0 11	0 4	—	—
396	cwt.	Lini semina contusa E.I. ..	7 lb.	3 0	14 lb.	5 6
5.5	lb.	Lini semina contusa	0 9	0 3	—	—
5	lb.	Lini sem. farina (sine oleo) ..	0 9	0 3	—	—
		Linimenta				
96	lb.	Lin. A.B.C. .. .. *B*	—	3 4	0 11	0 2
39	lb.	Lin. A.B.C. meth. .. *B*	—	1 5	0 5	0 1
102	lb.	Lin. aconiti .. .. *B*	—	3 3	0 9	0 2
42	lb.	Lin. aconiti co. meth. N.I.F. *B*	—	1 5	0 5	—
22	lb.	Lin. aconiti meth. .. *B*	—	0 8	0 3	—
34	lb.	Lin. æruginis P.L.F.	—	1 3	0 4	—
16	lb.	Lin. album (acetic)	2 0	0 7	0 2	—
15	lb.	Lin. album (ammon.)	2 0	0 7	0 2	—
32	lb.	Lin. album conc.	4 0	1 2	0 4	—
21	lb.	Lin. anodyn.	—	0 10	0 3	—
15	lb.	Lin. album (B.P.C.)	2 0	0 7	0 2	—
14	lb.	Lin. alb. N.H.I.	—	0 7	0 2	—
48	lb.	Lin. ammoniæ .. .. *E*	—	1 7	0 6	—
96	lb.	Lin. belladonnæ .. *B*	—	3 3	0 11	0 2
28	lb.	Lin. belladonnæ meth. *B*	—	0 11	0 4	0 1
126	lb.	Lin. betulæ co. (Hewlett) ..	—	4 6	1 3	—
		Lin. calaminæ B.P.C.	4 0	1 9	0 6	—
		Lin. calaminæ co. B.P.C. ..	4 0	1 9	0 6	—
15	lb.	Lin. calcis	1 10	0 7	0 2	—
21	lb.	Lin. camphoræ	2 3	0 8	0 3	—
78	lb.	Lin. camph. ammoniatum *E*	—	2 9	0 9	—
21	lb.	Lin. camph. ammoniatum meth. *E*	—	0 9	0 3	—
96	lb.	Lin. capsici B.P.C.	—	3 8	1 0	—
33	lb.	Lin. capsici co. meth.	—	1 3	0 5	—
42	lb.	Lin. capsici meth.	—	1 5	0 5	—
50	lb.	Lin. chloroformi .. *C*	—	2 3	0 9	0 2
132	lb.	Lin. crotonis .. .. *C*	—	4 9	1 4	0 3
51	lb.	Lin. hydrargyri	—	3 0	1 0	0 2
24	oz.	Lin. menthol	—	—	3 6	0 7
50	lb.	Lin. methyl salicylatis	—	1 10	0 6	0 1
60	lb.	Lin. methyl salicylatis co. ..	—	2 2	0 8	0 2
22	lb.	Lin. methyl sal. N.H.I. ..	—	0 11	0 4	—
87	lb.	Lin. opii .. .. *B, ex F*	—	3 1	0 10	0 2
95	lb.	Lin. opii ammoniatum *B, ex F*	—	3 5	1 0	0 2
39	lb.	Lin. opii ammon. meth. *B, ex F*	—	1 5	0 5	—
39	lb.	Lin. opii meth. .. *B, ex F*	—	1 5	0 5	0 1
72	lb.	Lin. potasii iodidi B.P.C. ..	—	2 7	0 9	0 2
30	lb.	Lin. potasii iodidi c. sapone ..	—	1 1	0 4	—
72	lb.	Lin. saponis	—	2 6	0 8	—
14	lb.	Lin. saponis meth.	1 8	0 6	0 2	—
102	lb.	Lin. sinapis	—	3 11	1 1	0 2
42	lb.	Lin. sinapis meth.	—	1 6	0 5	—
20	lb.	Lin. terebinthinæ	2 6	0 9	0 3	—
27	lb.	Lin. terebinthinæ aceticum ..	3 4	1 0	0 4	—
20	lb.	Lin. universale P.L.F.	3 0	0 11	0 3½	—
		Liquores				
132	lb.	Liq. actææ rac. conc. (Hewlett)	—	4 9	1 4	0 3
38	lb.	Liq. acidi chromici	—	1 5	0 5	0 1
24	lb.	Liq. acriflavini B.P.C.	3 0	1 0	0 4	—
20	oz.	Liq. adrenalini hydrochloricus ..	—	—	2 11	0 5
20	lb.	Liq. aluminii acetatis	2 6	0 9	0 3	—
21	lb.	Liq. alumin. aceto-tart. ..	2 8	0 9	0 3	—
8.5	lb.	Liq. ammoniæ dil. .. *E*	1 2	0 4	0 1	—
9	lb.	Liq. ammoniæ fort. 0.888 *E*	1 2	0 4	0 2	—
10	lb.	Liq. ammoniæ fort. 0.880 *E*	1 3	0 5	0 2	—
11	lb.	Liq. ammonii acetatis dil. ..	1 5	0 5	0 2	—
15	lb.	Liq. ammon. N.H.I.	—	0 7	0 2	—

Cost	Li	Selling Price			
per	Liquores—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
lb.	Liq. ammon. acet. fort. ..	—	0 10	0 3	—
lb.	Liq. ammon. citratis	2 3	0 9	0 3	—
lb.	Liq. ammon. citr. fort. (1 to 3)	—	1 6	0 6	—
lb.	Liq. antimonii chloridi coml. ..	2 0	0 8	0 3	—
lb.	Liq. arsenicalis .. .. *B*	—	0 7	0 3	—
lb.	Liq. arsenici bromat. .. *B*	—	1 2	0 4	—
lb.	Liq. arsenici hydrochloricus *B*	—	0 9	0 3	—
lb.	Liq. arsen. et hydr. iodid. *B*	—	0 11	0 4	—
oz.	Liq. atropinæ sulphatis *B*	—	—	1 9	0 4
oz.	Liq. auri et arsen. bromat. *B*	—	—	2 2	0 5
lb.	Liq. bismuthi conc. B.P.C. ..	—	—	0 6	0 2
lb.	Liq. bismuthi et am. cit. ..	—	0 10	0 3	—
lb.	Liq. bismuthi (Schacht) ..	—	1 10	0 6	0 1
lb.	Liq. bromidi co. B.P.C. ..	—	2 10	0 10	0 2
lb.	Liq. bromochloral co. B.P.C. *C*	—	2 0	0 7	—
lb.	Liq. calcii bisulphitis	0 7	0 3	—	—
lb.	Liq. calcii chloridi	1 2	0 4	0 2	—
gal.	Liq. calcii hydroxid.	pint	0 5	—	—
lb.	Liq. calcis chlorinatæ	1 2	0 5	0 2	—
lb.	Liq. calcis chlor. c. ac. bor. B.P.C.	1 0	0 4	—	—
lb.	Liq. calcis saccharatus	1 5	0 5	0 2	—
lb.	Liq. calcis sulphuratæ	1 6	0 6	0 2	—
lb.	Liq. caoutchouc	—	3 7	1 0	—
pt.	Liq. carb. deter. (Wright) unstd.	—	—	0 5	0 1
lb.	Liq. carmini	6 0	1 9	0 6	0 1
lb.	Liq. cauloph. et puls. co. (Oppenheimer)	—	3 9	1 0	—
lb.	Liq. cauloph. et pulsat. B.P.C.	—	3 3	0 11	0 2
lb.	Liq. chlori	2 0	0 8	—	—
lb.	Liq. cocci cact.	—	1 2	0 4	—
lb.	Liq. cocci cact. B.P.C.	—	3 5	1 0	—
lb.	Liq. cop. et buc. et cub. B.P.C.	—	2 7	0 9	0 2
lb.	Liq. cresolis glycerinatus *C*	2 4	0 10	0 3	—
lb.	Liq. cresolis saponatus .. *C*	2 1	1 1	0 4	—
oz.	Liq. epispasticus .. *C*	—	—	1 10	0 4
25 gm	Liq. ergosterol irrad.	—	0 2	per	mil
oz.	Liq. ethyl nitritis	—	—	2 0	0 4
oz.	Liq. euonymi	—	—	1 6	1 3
lb.	Liq. euonymi et cascaræ ..	—	3 9	1 0	0 2
lb.	Liq. euonymi et iridini ..	—	2 2	0 7	0 1
lb.	Liq. euonymini et papaini ..	—	2 9	0 10	0 2
lb.	Liq. euonymini et pepsini ..	—	2 0	0 7	0 1
lb.	Liq. euonymini et pepsini c̄ bis. co. (Oppenheimer)	—	3 9	1 0	—
lb.	Liq. ferri acetatis	—	1 0	0 4	—
lb.	Liq. ferri albuminatis B.P.C. ..	—	2 10	0 10	—
lb.	Liq. ferri dialysatus '85.. ..	—	0 10	0 3	—
lb	Liq. ferri peptonatis	—	2 6	0 9	—
lb	Liq. ferri perchloridi fortis ..	—	0 8	0 3	—
lb.	Liq. ferri perchloridi	—	0 6	0 2	—
lb.	Liq. ferri pernitratis	—	0 7	0 2	—
lb.	Liq. ferri persulphatis	—	0 9	0 3	—
lb.	Liq. formaldehydi	1 6	0 6	0 2	—
lb.	Liq. formaldehydi saponatus ..	6 0	1 9	0 6	—
oz.	Liq. gutta-percha B.P.C. *C*	—	—	2 10	—
oz.	Liq. glyceryl trinitratis	—	—	1 8	0 3
lb.	Liq. hamamelidis	2 9	0 10	0 3	—
oz.	Liq. hydrargyri nitratis acidus..	—	—	1 3	0 3
lb.	Liq. hydrargyri perchloridi *C*	—	0 5	0 2	—
lb.	Liq. hydrogenii perox. 10 vol...	1 0	0 4	0 2	—
lb.	Liq. hydrogenii perox. 20 vol...	1 6	0 6	0 2	—
lb.	Liq. iodi. fortis	—	2 9	0 9	0 2
lb.	Liq. iodi. mitis	7 6	2 2	0 7	0 1
lb.	Liq. iodi. simp.	—	3 9	1 0	—
lb.	Liq. magnesii bicarbonatis ..	1 6	0 5	0 2	—
	Liq. magnesii bicarbonatis pkd.	℥vj.	1 0	—	—
oz.	Liq. morphinæ acetatis *B, F*	—	—	1 6	0 3
oz.	Liq. morphinæ bimeconatis *B, F*	—	—	1 11	0 4

Cost		Li—Lo	Selling Price			
d.	per	Liquores—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
10	oz.	Liq. morphinæ hydrochloridi *B, F*	—	—	1 6	0 3
10	oz.	Liq. morphinæ sulphatis *B, F*	—	—	1 11	0 4
13	oz.	Liq. morphinæ tartratis *B, F*	—	—	1 9	0 4
78	lb.	Liq. opii sedativus B.P.C. *B, F*	—	2 9	0 9	0 2
84	lb.	Liq. opii sedativus P.L.F. *B, F*	—	3 0	0 10	0 2
258	lb.	Liq. opii sed. (Battley) .. *B, F*	—	8 6	2 5	0 5
78	lb.	Liq. pancreaticus P.L.F. ..	—	2 10	0 9	—
101	lb.	Liq. pancreat. (Benger).. fl.	—	3 6	1 0	0 2
60	lb.	Liq. pancreatis	—	2 2	0 8	0 2
48	lb.	Liq. papaini et iridini B.P.C. ..	—	1 9	0 6	0 1
84	lb.	Liq. pepsini P.L.F.	—	2 2	0 9	0 2
84	lb.	Liq. pepsini et papaini	—	3 0	0 10	0 2
24	lb.	Liq. pepticus B.P.C.	—	0 11	0 3	—
120	lb.	Liq. pepticus (Benger)	—	3 9	1 0	0 2
96	lb.	Liq. picis carbonis	—	3 5	1 0	0 2
18	lb.	Liq. picis carbonis meth. ..	2 0	0 7	0 2	—
11	lb.	Liq. plumbi subacetatis fortis ..	1 9	0 7	0 2	—
4	lb.	Liq. plumbi subacetatis ..	0 6	0 2	0 1	—
10	lb.	Liq. potassæ	1 3	0 5	0 2	—
8.5	lb.	Liq. potassii permanganatis ..	1 1	0 4	0 2	—
50	lb.	Liq. quin. ammon.	—	1 9	0 6	0 1
75	lb.	Liq. quin. ammon. c.cinnam. ..	—	2 8	0 9	0 2
42	lb.	Liq. rhei dulcis P.L.F. ..	—	1 7	0 6	0 1
28	lb.	Liq. rosæ dulcis B.P.C. ..	—	1 0	0 4	0 1
63	lb.	Liq. sabal. co.	—	—	0 8	0 2
12	lb.	Liq. sacch. ust. B.P.C... ..	—	—	0 2	0 1
144	lb.	Liq. santali co. B.P.C. ..	—	5 2	1 4	—
120	lb.	Liq. santali co. P.L.F.	—	5 4	1 6	0 3
150	lb.	Liq. santali flav. c. buchu et cubeb. (Hewlett)	—	4 10	1 3	0 3
39	lb.	Liq. saponis æther	4 9	1 5	0 6	—
114	lb.	Liq. sedans (P.D.)	—	3 9	1 0	0 2
30	lb.	Liq. sennæ dulcis	—	1 3	0 5	0 1
11	oz.	Liq. senecio co.	—	—	1 8	0 3
11	lb.	Liq. sodæ	1 6	0 6	0 2	—
11	lb.	Liq. sodæ chlorinatæ	1 6	0 6	0 2	—
11	lb.	Liq. sodæ chlor. c. ac. bor. B.P.C. (conc. 1-9)	—	1 5	0 6	0 1
11	lb.	Liq. sod. chlor.c. sod. bic. B.P.C. (conc. 1-9)	—	1 5	0 6	0 1
11	lb.	Liq. sod. chlor. chir.	1 6	0 6	—	—
15	lb.	Liq. sodii arsenatis .. *B*	—	0 7	0 3	—
4.5	lb.	Liq. sodii bisulphitis	0 7	0 3	0 1	—
20	lb.	Liq. sodii carbolatis co. *C*	—	0 9	0 3	—
26	oz.	Liq. sodii ethylatis	—	—	3 9	0 7
30	lb.	Liq. strychninæ hydrochloridi *B*	—	1 1	0 6	0 1
45	lb.	Liq. taraxaci	—	1 9	0 6	0 1
30	lb.	Liq. thymol. co.	3 6	1 1	0 4	—
76	lb.	Liq. trypsin.	—	—	0 10	0 2
9	oz.	Liq. viburni prunif. co. ..	—	—	1 4	0 3
30	lb.	Liq. zinci chloridi pur. *C*	—	1 4	0 5	—
12	lb.	Liq. zinci chloridi coml. *E*	2 2	0 8	—	—
36	14 oz.	Listerine, unstd.	—	1 4	0 4	—
33	oz.	Lithii acetylsalicylas	—	—	4 10	0 9
13	oz.	Lithii benzoas	—	—	1 11	0 4
16	oz.	Lithii bromidum	—	—	2 4	0 4
13	oz.	Lithii carbonas	—	—	1 11	0 4
11	oz.	Lithii citras	—	—	1 8	0 3
45	lb.	Lithii citras effervescens ..	—	1 8	0 6	—
39	oz.	Lithii glycerophos.	—	—	5 9	0 10
40	oz.	Lithii guaiacas	—	—	5 10	0 10
45	oz.	Lithii hippuras	—	—	6 7	1 1
22	oz.	Lithii iodidum	—	—	3 3	0 6
24	oz.	Lithii lactas	—	—	3 9	0 7
12	oz.	Lithii salicylas	—	—	1 9	0 3
14	oz.	Lithii sulphas	—	—	2 0	0 4
240	24v.	Liver extract (P, D. & Co.) ..	each	26 8	—	—
45	lb.	Lobelia pkts. .. .. *C*	—	1 8	0 6	—

Cost d.	Cost per	Lo—Ma	Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
36	lb.	Lobeliæ pulvis *C*	—	1 1	0 4	—
8	lb.	Lotio acidi borici 1 in 32	1 0	0 6	0 2	—
12	lb.	Lotio acidi carbol. rub. 5 p.c. *C*	1 8	0 7	0 3	—
16	lb.	Lotio calaminæ B.P.C.	2 0	0 7	0 2	—
222	lb.	Lotio crinalis B.P.C.	—	8 0	2 2	0 4
15	lb.	Lotio hydrargyri flava *C*	2 3	0 10	0 3	—
15	lb.	Lotio hydrargyri nigra *C*	2 3	0 8	0 3	—
8.5	lb.	Lotio hyd. perch. 1 in 1,000 *C*	1 2	0 4	0 2	—
14	lb.	Lotio plumbi c. opio *C*	1 9	0 6	—	—
44	lb.	Lotio resorcin. composita	6 0	1 9	0 6	—
15	lb.	Lotio rubra	2 0	0 7	—	—
8	lb.	Lot. plumbi	1 0	0 4	—	—
115	oz.	Luminal *B*	—	—	—	2 6
72	100	Luminal tablets gr. 1½ *B*	doz.	1 2	—	—
126	oz.	Luminal, sodium *B*	—	—	—	3 0
30	oz.	Lupulinum	—	—	4 5	0 8
36	lb.	Lupulus	4 6	1 4	0 5	—
4	oz.	Lycopodium	—	—	0 7	0 2
5	ea.	Lymph. calf	ea.	0 8	—	—
13	lb.	Lysol *C*	1 10	1 1	0 4	—
		M				
60	lb.	Macis opt.	7 6	2 2	0 8	—
48	lb.	Macis opt. parv.	5 9	1 9	0 6	—
60	lb.	Macidis pulvis opt.	7 6	2 2	0 8	—
48	lb.	Madder	6 0	1 9	0 6	—
22	50	Magisal tab. (Martindale)	doz.	0 9	—	—
		Magnesium				
30	lb.	Magnesia levis	3 9	1 1	0 4	—
44	lb.	Magnesia ponderosa	5 8	1 8	0 6	—
84	lb.	Magnes. boro-citras	—	3 0	0 10	0 2
13	lb.	Magnes. carbonas levis	1 8	0 7	0 2	—
15	lb.	Magnes. carbonas ponderosus	1 10	0 7	0 2	—
84	lb.	Magnes. citras (ver.)	—	3 0	0 10	0 2
21	lb.	Magnes. cit. gran. efferv.	2 9	0 9	0 3	—
		Magnes. cit. eff. opt. pkd.	—	1 0	8 oz.	1 9
19	lb.	Magnes. cit. gran. eff. sec.	2 6	0 9	0 3	—
8	oz.	Magnes. formas	—	—	1 2	0 2
14	oz.	Magnes. glycerophosphas	—	—	2 0	0 4
33	lb.	Magnes. hydroxidum	—	1 3	0 5	0 1
13	oz.	Magnes. hypophosphis	—	—	2 0	0 4
11	oz.	Magnes. lactas	—	—	1 8	0 3
9	oz.	Magnes. peroxidum 15%	—	—	1 4	0 3
4	oz.	Magnes. phosph. acid	—	—	0 7	0 1
39	lb.	Magnes. phosphas	—	1 5	0 5	0 1
6	oz.	Magnes. salicylas	—	—	1 0	0 2
48	lb.	Magnes. silicas pur. precip.	—	1 9	0 6	0 1
4	lb.	Magnes. sulphas opt.	0 6	0 3	0 1	—
		Magnes. sulphas opt. pkd.	—	0 4	0 2	—
5	lb.	Magnes. sulphas (Howards)	0 8	0 4	0 2	—
7	lb.	Magnes. sulphatis pulvis	1 0	0 4	0 2	—
10	lb.	Magnes. sulphatis pulvis exsicc.	1 3	0 5	0 2	—
5	lb.	Magnes. sulphatis pulvis color.	0 9	0 3	—	—
8	lb.	Magnes. sulphatis pulvis exsicc.	1 0	0 4	0 2	—
5	lb.	Magnes. sulphatis pulvis color.	0 9	0 3	—	—
312	cwt.	Magnes. sulphas color.	7 lb.	2 5	14 lb.	4 4
3	lb.	Magnes. sulphas coml.	0 5	0 2	—	—
40	cwt.	Magnes. sulphas coml.	7 lb.	2 0	14 lb.	3 6
27	lb.	Magnes. sulphas efferv.	3 5	1 0	0 4	—
14	oz.	Magnesium (powder)	—	—	2 0	0 4
21	oz.	Magnesium (ribbon)	foot	0 3	2 9	—
24	16 oz.	Magneslait (D.F.)	bot.	1 3	0 4	—
15	oz.	Malachite green	—	—	2 3	0 4
30	oz.	Maltose	—	—	4 5	0 8

Cost d.	Cost per	Ma—Mi	Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
36	lb.	Mangan. carbonas	—	—	0 5	0 1
18	lb.	Mangani chloridum	—	0 8	0 3	—
22	oz.	Mangani glycerophosphas	—	—	3 3	0 6
11	oz.	Mangani hypophosphis	—	—	1 8	0 3
8	lb.	Mangani oxidum nig. coml.	1 0	0 4	0 2	—
9	lb.	Mangani oxidum nig. gran.	1 2	0 4	0 2	—
7	oz.	Mangani peroxidum pur. præcip.	—	—	1 1	0 2
24	lb.	Mangani sulphas	—	0 11	0 3	—
20	lb.	Mange dressing P.L.F.	2 6	0 9	—	—
108	lb.	Manna elect. nov.	—	4 0	1 1	0 2
15	oz.	Mannite	—	—	2 3	0 4
84	lb.	Maranta Bermuda ver.	10 6	3 0	0 10	0 2
39	lb.	Maranta Bermuda	4 11	1 5	0 5	—
24	lb.	Maranta St. Vincent opt.	3 0	0 11	0 3	—
18	lb.	Maranta St. Vincent sec.	2 3	0 9	0 3	—
180	lb.	Marking ink P.L.F.	—	—	1 9	0 4
12	lb.	Marrubium sicc.	1 6	0 6	0 2	—
14	lb.	Marylebone cream	1 9	0 7	—	—
72	lb.	Mastich. elect.	—	2 7	0 9	0 2
14	lb.	Maw seed	1 9	0 6	0 2	—
114	oz.	Medinal *B*	—	—	—	2 4
129	100	Medinal tablets gr. 5	doz.	2 4	—	—
192	100	Medinal tablets gr. 7½ *B*	doz.	3 6	—	—
18	lb.	Mel Ang.	2 3	0 8	0 3	—
14	lb.	Mel Calif.	1 9	0 7	0 2	—
12	lb.	Mel Jam.	1 6	0 6	0 2	—
14	lb.	Mel New Zealand	1 9	0 7	—	—
10	lb.	Mel W.I.	1 3	0 5	0 2	—
16	lb.	Mel boracis	2 0	0 7	0 3	—
15	lb.	Mel depuratum	2 0	0 7	0 3	—
24	lb.	Mel rosæ	—	0 11	0 4	—
16	lb.	Mentha pulegium	2 0	0 7	0 2	—
18	oz.	Menthol	—	—	2 8	0 4
15	oz.	Menthol, synthetic	—	—	2 3	0 4
42	oz.	Menthol cones (4 to oz.)	ea.	1 6	—	—
45	oz.	Menthol cones (8 to oz.)	ea.	0 10	—	—
18	oz.	Menthol snuff	—	—	2 8	0 5
126	oz.	Menthol camphoras	—	—	—	3 0
60	oz.	Menthol valerianas	—	—	—	1 3
12	lb.	Mercurial cream wgt. *C*	—	—	1 6	0 4
60	10c.c.	Mercurochrome solution	per	c.c.	0 11	—
48	16 oz.	Metatone (P. D. Co.)	6 0	8 oz.	3 6	—
24	oz.	Methylacetanilidum	—	—	3 6	0 6
18	oz.	Methyl orange	—	—	2 9	0 6
96	lb.	Methyl orange sol.	—	3 6	1 0	—
4	oz.	Methyl salicylas	—	—	0 7	0 1
36	oz.	Methylsulphonal *C*	—	—	5 3	0 9
26	oz.	Methylthionin chlor.	—	—	3 9	0 7
18	oz.	Metol	—	—	2 3	0 4
18	lb.	Mezerei cortex	—	0 8	0 3	—
18	20	Migranine tablets gr. 5½	doz.	1 8	—	—
		Misturæ				
8.5	lb.	Mistura alba	1 0	0 5	0 2	—
120	lb.	Mist. ammoniaci co. conc. (1 to 7)	—	4 3	1 2	0 2
15	lb.	Mist. amygdalæ	2 0	0 7	0 2	—
54	lb.	Mist. bismuthi c. morphina *C*	7 0	2 1	0 8	—
34	lb.	Mist. bismuthi co. B.P.C.	4 9	1 5	0 5	—
33	lb.	Mist. bis. co. c. peps. B.P.C.	—	1 6	0 6	—
123	16 oz.	Mist. bismuthi (Seller) fl.	—	3 10	1 0	0 2
36	lb.	Mist. carminativa B.P.C.	4 6	1 4	0 5	—
14	lb.	Mist. cascaræ co. B.P.C.	1 10	0 7	0 2	—
18	lb.	Mist. chlori B.P.C.	2 6	0 9	0 3	—
20	lb.	Mist. chloroformi co. B.P.C.	2 9	0 10	0 3	—
26	lb.	Mist. creosoti conc.	—	—	1 1	0 2
		Mist. cretæ (*v.* Pulv. pro)				
28	lb.	Mist. diarrhœa (B. of H.) P.L.F.	3 6	1 0	0 4	—
38	lb.	Mist. ferri aromatica	5 0	1 7	0 5	—

Mi—Oc

Cost d.	Cost per	Misturæ—(cont.)	Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
26	lb.	Mist. ferri composita	3 3	1 0	0 4	—
18	lb.	Mist. (gripe) P.L.F.	—	℥ viij.	1 3	—
27	lb.	Mist. guaiaci	3 4	1 0	0 4	—
6	lb.	Mist. (influenza) P.L.F. ..	—	℥ viij.	2 6	—
6	lb.	Mist. magnesii hydroxidi ..	2 7	0 9	0 3	—
24	lb.	Mist. olei ricini	3 0	1 0	0 3	—
0	lb.	Mist. pepsini co.	4 0	1 3	0 5	—
0	lb.	Mist. pepsini et bis. (Hewlett)..	—	5 5	1 7	—
4	lb.	Mist. sennæ co...	2 1	0 7	0 2	—
0	lb.	Mist. senecio. co. (Hewlett) ..	—	5 5	1 7	—
12	lb.	Mist. tonic sedat. (Hewlett) ..	—	1 6	0 6	—
3	lb.	Mist. tussi rub. (Hewlett) ..	—	1 3	0 4	—
[illegible]	lb.	Mist. veronigen co. (Hewlett) *C*	—	4 5	1 3	—
6	lb.	Mithridate (vet.) P.L.F. ..	4 6	1 4	—	—
8	75 g.	Mitigal liquid	—	each	2 0	—
0	dr.	Morphina pur. .. .. *B, F*	per	gr.	0 4	13 0
2	dr.	Morphinæ acetas .. *B, F*	per	gr.	0 4	10 6
2	dr.	Morphinæ hydrochloridum *B, F*	per	gr.	0 4	10 6
2	dr.	Morphinæ sulphas .. *B, F*	per	gr.	0 4	10 6
[illegible]	dr.	Morphinæ tartras .. *B, F*	per	gr.	0 4	13 0
[illegible]	dr.	Moschus Chin. in gran. ..	per	gr.	1 2	—
7	oz.	Moschus artificial.	—	—	4 0	0 8
2	lb.	Mucilago acaciæ	2 9	0 10	0 3	—
8	lb.	Mucilago tragacanthæ	2 3	0 9	0 3	—
0	lb.	Mustard F	3 9	1 2	0 5	—
6	lb.	Mustard D.S.F.	4 6	1 3	0 5	—
7	lb	Mustard bran	0 10½	0 4	—	—
[illegible]	lb.	Myristicæ 64's	—	1 5	0 5	—
2	lb.	Myristicæ 80's	—	1 2	0 4	—
6	lb.	Myristicæ pulvis	—	0 11	0 3	—
[illegible]	lb.	Myrrh. elect.	—	3 0	0 10	0 2
[illegible]	lb.	Myrrh. sorts	—	1 9	0 6	0 1
6	lb.	Myrrh. sorts, parv.	4 6	1 4	0 4	0 1
6	lb.	Myrrh. pulv. opt.	—	2 5	0 9	—
0	lb.	Myrrh. pulv. sec. (vet.) ..	3 9	1 2	—	—
		N				
4	pt.	Naphtha solvent	pint	1 9	—	—
[illegible]	lb.	Naphthalin. pur.	—	1 9	0 6	—
.5	lb.	Naphthalin. coml. flake ..	0 8	0 3	0 1	—
[illegible]	oz.	Naphthalin tetrachlor.	—	—	4 5	0 8
.5	lb.	Naphthal. coml. glob.	0 8	0 3	0 1	—
6	oz.	Naphthol (beta)	—	—	0 11	0 2
4	oz.	Naphthol salicyl.	—	—	3 6	0 6
3	dr.	Narcotina	—	—	—	3 5
6	25	Neo-bornyval perles	doz.	1 9	ea.	3 6
[illegible]	oz.	Neo-protosil	—	—	—	1 7
9	4 oz.	Nepenthe .. .. *B, F*	—	5 0	1 4	0 3
2	lb.	Nessler's solution	—	1 8	0 6	—
6	lb.	Nickel chloridum	—	1 4	0 5	—
2	lb.	Nickel sulphas coml.	1 3	0 5	0 2	—
1	oz.	Nicotina coml. .. .. *B*	—	—	3 1	0 6
2	lb.	Nicotine fumigant P.L.F. *B*	—	—	1 8	—
6	lb.	Nitrobenzenum	—	0 7	0 2	—
8	oz.	Novalgin pulv.	—	—	8 6	1 3
8	25 t.	Novalgin tabs.	—	2 6	tube	—
8	gm.	Novocain	per	gr.	0 3	—
2	lb.	Nucis vomicæ pulvis .. *B*	2 9	1 0	0 4	0 1
1	lb.	Nux vomic. pulverata	—	—	0 4	0 1
		O				
4	oz.	Oculentum acidi borici	—	—	0 6	0 1
2	doz.	Oculenta in tubes	—	1 0	each	—
4	oz.	Oculent. atropinæ .. *B*	—	—	2 0	0 4
6	oz.	Oculent. flavum .. *C*	—	—	0 10	0 2
0	oz.	Oculent. flav. c. atropina *B*	—	—	1 6	0 4

Oc—Ol

Cost d.	Cost per		Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
12	oz.	Oculent. physostigminæ *C*	—	—	1 6	0 4
34	oz.	Oleo-resin cubebæ	—	—	4 6	0 10
		Olea				
66	lb.	Oleum abietis	—	2 6	0 8	0 2
18	lb.	Ol. adipis	—	0 8	0 3	—
150	dr.	Ol. allii	per	min.	0 6	—
60	oz.	Ol. amygd. Ang. ess. s.a.p. ..	—	—	8 6	1 3
51	lb.	Ol. amygdalæ Ang.	—	1 10	0 7	—
48	lb.	Ol. amygdæ dulc. exot... ..	6 0	1 9	0 6	—
21	oz.	Ol. anethi Ang.	—	—	3 1	0 6
210	oz.	Ol. angelicæ rad.	—	—	—	4 5
84	gal.	Ol. animale	1 3	0 5	0 2	—
51	lb.	Ol. anisi stellati	—	1 10	0 6	0 1
50	dr.	Ol. anthemidis	per	min.	0 2	7 4
57	oz.	Ol. apii	—	—	8 4	1 3
13	lb.	Ol. arachis	1 8	0 7	0 2	—
18	lb.	Ol. arachis pallid	2 3	0 8	0 3	—
16	oz.	Ol. aurantii amari	—	—	—	0 3
13	oz.	Ol. aurantii dulcis	—	—	—	0 3
30	oz.	Ol. aurantii tangierin	—	—	—	0 8
10	oz.	Ol. bergamottæ	—	—	1 6	0 3
30	lb.	Ol. cadinum	—	1 1	0 4	0 1
6	oz.	Ol. cajuputi	—	—	1 1	0 2
27	oz.	Ol. calam. arom.	—	—	4 0	0 7
24	lb.	Ol. camphoræ ess. alb.	—	0 11	0 3	—
24	lb.	Ol. camphoræ ess. fusc. ..	—	0 11	0 3	—
27	oz.	Ol. canangæ	—	—	4 0	0 7
19	lb.	Ol. carbolicum 5 per cent. *C*	2 3	0 8	0 3	—
17	lb.	Ol. carbol. (vet.) 5 per cent. *C*	2 0	0 7	—	—
21	oz.	Ol. cari exot.	—	—	3 0	0 5
8	oz.	Ol. caryophylli	—	—	1 2	0 2
11	oz.	Ol. cassiæ	—	—	1 8	0 3
14	oz.	Ol. cedri ligni (micros.) ..	—	—	2 0	0 4
51	lb.	Ol. cedri ligni	—	1 11	0 7	0 1
60	gal.	Ol. cetacei	1 0	0 4	0 2	—
5	oz.	Ol. chaulmoogræ	—	—	0 9	0 2
18	oz.	Ol. chenopodii	—	—	2 8	0 5
8	oz.	Ol. cinereum	—	—	2 4	0 4
54	oz.	Ol. cinnamomi	—	—	—	1 2
10	oz.	Ol. cinnamomi fol.	—	—	1 6	0 3
5	oz.	Ol. citronellæ	—	—	0 9	0 2
12	lb.	Ol. cocois nuciferæ	1 6	0 6	0 3	—
52	gal.	Ol. colzæ (quantity)	gal.	6 6	pint	0 11
7	oz.	Ol. copaibæ	—	—	1 1	0 2
36	oz.	Ol. coriandri Ang.	—	—	—	0 9
27	oz.	Ol. coriandri exot.	—	—	—	0 7
14	oz.	Ol. crotonis	—	—	2 0	0 4
24	oz.	Ol. cubebæ Ang.	—	—	3 6	0 6
26	lb.	Ol. eucalypti	3 3	1 0	0 4	—
24	lb.	Ol. eucalypti amygdalæ ..	—	0 11	0 4	—
11	oz.	Ol. eucalypti citriodoræ ..	—	—	1 8	0 3
54	lb.	Ol. eucalypti glob.	—	2 0	0 8	—
54	oz.	Ol. fœniculi Ang.	—	—	—	1 4
12	oz.	Ol. fœniculi exot.	—	—	1 9	0 3
14	oz.	Ol. gaultheriæ	—	—	2 0	0 4
36	oz.	Ol. geranii Afric.	—	—	5 3	0 9
18	oz.	Ol. geranii E.I.	—	—	2 8	0 5
54	oz.	Ol. geranii Gall.	—	—	8 0	1 2
66	gal.	Ol. gossypii sem.	1 0	0 4	0 2	—
27	lb.	Ol. gurgun.	—	1 0	0 4	—
		Ol. hippoglossi (*see* halibut-liver oil)				
5	oz.	Ol. hydnocarp.	—	—	0 9	0 2
90	dr.	Ol. iridis concret.	—	—	—	13 2
13	oz.	Ol. jasmini	—	—	2 0	0 4
48	oz.	Ol. juniperi bacc. Ang. ..	—	—	7 0	1 0
8	oz.	Ol. juniperi bacc. exot. ..	—	—	1 2	0 2

Cost		Ol	Selling Price			
d.	per	Olea—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
60	lb.	Ol. juniperi ligni	—	2 2	0 7	0 1
114	oz.	Ol. lavandulæ Ang.	—	—	—	2 4
36	oz.	Ol. lavandulæ ab flor.	—	—	5 3	0 9
31	oz.	Ol. lavandulæ redist.	—	—	4 5	0 8
156	lb.	Ol. lavandulæ Gall.	—	—	1 8	0 3
168	lb.	Ol. lavandulæ spic. ver. ..	—	5 10	1 9	0 3
120	lb.	Ol. lavandulæ spic. coml. ..	—	4 3	1 2	0 2
36	oz.	Ol. limettæ dest.	—	—	5 3	0 9
120	oz.	Ol. limettæ (hand pressed) ..	—	—	—	2 6
10	oz.	Ol. limonis	—	—	1 6	0 3
9	oz.	Ol. limonis (Messina)	—	—	1 4	0 3
36	oz.	Ol. linaloes	—	—	4 6	0 10
48	gal.	Ol. lini opt.	pint	0 9	0 2	—
51	gal.	Ol. lini (boiled)	pint	0 10	0 2	—
36	gal.	Ol. lini (cattle)	pint	0 8	gal.	4 6
120	dr.	Ol. lupuli Ang.	per	min.	0 4	—
15	oz.	Ol. marjoram	—	—	2 3	0 4
90	lb.	Ol. menthæ Jap. (dementh.) ..	—	3 3	0 11	0 2
78	oz.	Ol. menthæ pip. (Mitcham) ..	—	—	—	1 8
288	lb.	Ol. menthæ pip. redest. ..	—	10 3	3 0	0 5
100	oz.	Ol. menthæ vir. Ang.	—	—	—	2 6
20	oz.	Ol. menthæ vir. exot.	—	—	2 10	0 6
96	gal.	Ol. morrhuæ (Newfl.)	1 4	0 6	0 2	—
114	gal.	Ol. morrhuæ (Nor.)	1 8	0 7	0 2	—
66	gal.	Ol. morrhuæ (vet.)	pint	1 0	gal.	8 6
13	oz.	Ol. myricæ acris ess.	—	—	2 0	0 4
17	oz.	Ol. myristicæ Ang.	—	—	2 6	0 5
13	oz.	Ol. myristicæ exot.	—	—	1 11	0 4
16	oz.	Ol. myristicæ express.	—	—	2 4	0 4
16	lb.	Ol. neatsfoot	2 0	0 7	0 2	—
63	dr.	Ol. neroli	per	min.	0 3	—
54	dr.	Ol. neroli Ital.	per	min.	0 2	—
72	oz.	Ol. neroli synth.	—	—	—	1 5
144	gal.	Ol. olivæ (cream)	2 0	0 7	0 2	—
126	gal.	Ol. olivæ (sublime)	1 9	0 7	0 2	—
108	gal.	Ol. olivæ (fine)	1 6	0 6	0 2	—
13	oz.	Ol. origani alb.	—	—	1 8	0 4
72	lb.	Ol. origani coml.	—	2 7	0 9	0 2
15	lb.	Ol. palmæ	2 0	0 7	0 2	—
22	oz.	Ol. palmarosæ	—	—	3 3	0 6
24	oz.	Ol. patchouli	—	—	—	0 6
30	lb.	Ol. persicæ Ang.	3 9	1 2	0 4	—
38	lb.	Ol. persicæ Ang. pall.	4 9	1 5	0 5	—
18	oz.	Ol. petitgrain	—	—	2 8	0 5
13	oz.	Ol. phosphoratum	—	—	1 11	0 4
12	lb.	Ol. picis	1 6	0 6	0 2	—
16	lb.	Ol. picis rectificatum	2 0	0 7	0 3	—
14	oz.	Ol. pimentæ exot.	—	—	—	0 4
13	oz.	Ol. pini pumilionis	—	—	2 0	0 4
90	lb.	Ol. pini sylvestris fact.	—	—	0 11	0 2
144	lb.	Ol. pini (spruce)	—	5 2	1 6	0 3
42	oz.	Ol. piperis	—	—	5 0	1 0
100	oz.	Ol. pulegii Ang.	—	—	14 0	2 5
108	lb.	Ol. pulegii exot.	—	4 0	1 1	0 2
66	gal.	Ol. rapii	1 0	0 4	0 2	—
36	oz.	Ol. rhodii (fact.)	—	—	5 3	0 9
18	lb.	Ol. ricini Ital. insip.	2 3	0 8	0 3	—
13	lb.	Ol. ricini (first)	1 8	0 7	0 4	—
10	lb.	Ol. ricini (cattle)	1 4	0 6	—	—
84	gal.	Ol. ricini (cattle)	pint	1 6	gal.	10 6
48	lb.	Ol. ricini aromaticum	—	1 9	0 6	—
60	lb.	Ol. rosæ color.	—	2 2	0 7	—
180	oz.	Ol. rosmarini Ang.	—	—	—	4 4
45	lb.	Ol. rosmarini exot.	—	1 7	0 6	0 1
66	lb.	Ol. rosmarini super.	—	2 5	0 9	0 2
90	lb.	Ol. rosmarini Gall.	—	3 2	0 11	0 2
27	lb.	Ol. rusci B.P.C.	—	1 0	0 4	—
84	lb.	Ol. rusci ver.	—	3 0	0 10	0 2

Cost		Ol—Pa	Selling Price			
d.	per	Olea—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
22	oz.	Ol. rutæ	—	—	3 3	0 6
16	oz.	Ol. sabinæ	—	—	—	2 4
9	oz.	Ol. salviæ	—	—	1 4	0 3
18	lb.	Ol. sambuci viride	2 3	0 8	0 3	—
26	oz.	Ol. santal. Aust.	—	—	3 9	0 7
36	oz.	Ol. santali flav. Ang.	—	—	5 3	0 9
33	oz.	Ol. santali flav. E.I.	—	—	4 10	0 9
9	oz.	Ol. sassafras nat.	—	—	1 4	0 3
		Ol. sassaf. artif. (*v.* Safrol.) ..				
12	lb.	Ol. sesami	1 6	0 6	0 2	—
12	lb.	Ol. sinapis expressum	1 6	0 6	0 2	—
30	oz.	Ol. sinapis volatile	—	—	4 5	0 8
11	oz.	Ol. staphisagriæ	—	—	1 8	0 3
22	oz.	Ol. staphisagriæ (æther.) ..	—	—	3 3	0 7
20	lb.	Ol. succini rectificatum ..	—	0 9	0 3	—
78	gal.	Ol. terebinthinæ	pint	1 3	0 2	—
21	lb.	Ol. terebinthinæ rectificatum ..	2 5	0 9	0 3	—
30	lb.	Ol. theobromatis opt.	3 9	1 1	0 4	0 1
12	oz.	Ol. thymi alb.	—	—	1 9	0 3
102	lb.	Ol. thymi	—	3 8	1 0	—
10	oz.	Ol. thymi rub.	—	—	1 6	0 3
66	gal.	Ol. " train " opt.	pint	1 0	—	—
9	oz.	Ol. verbenæ	—	—	1 4	0 3
42	oz.	Ol. vetivert	—	—	—	1 0
78	gal.	Ol. " whale " opt.	pint	1 3	—	—
72	oz.	Ol. ylang-ylang	—	—	—	1 7
28	lb.	Olibanum	—	1 1	0 4	0 1
43	gm.	Omnopon pdr. (Roche) *B, F*	per	gr.	0 6	—
27	20	Omnopon tabs. .. .. *B, F*	doz.	2 0	—	—
28	oz.	Opium Turc. .. .. *B, F*	—	—	4 1	0 7
30	oz.	Opii pulv. .. .. *B, F*	—	—	4 5	0 8
60	5 gm.	Opoidine .. .. *B, F*	per	gr.	0 5	—
50	100	Opoidine tablets gr. ⅛ .. *B, F*	doz.	1 0	—	—
21	oz.	Optannin	—	—	—	0 6
11	20	Optannin tablets gr. 7½ ..	doz.	0 10	—	—
96	oz.	Orthocaina	—	—	—	2 0
99	oz.	Orthoform.	—	—	—	2 2
24	lb.	Ossis sepiæ (medium)	3 0	0 11	0 3	—
27	lb.	Ossis sepiæ pulv. subtil. ..	3 4	1 0	0 4	—
204	dr.	Otto rosæ (virgin)	per	min.	0 6	—
30	dr.	Otto rosæ (synthetic)	per	min.	0 2	4 5
15	lb.	Oxymel	2 3	0 8	0 3	—
26	lb.	Oxymel ipecacuanhæ	3 10	1 2	0 4	—
12	lb.	Oxymel scillæ	2 3	0 8	0 3	—
24	oz.	Oxyquinolin. sulph. (ortho.) ..	—	—	3 9	0 7
		P				
67	10c.c.	Padutin	0 10	per	c.c.	—
18	oz.	Pancreatini	—	—	2 8	0 5
42	oz.	Papainum	—	—	6 4	0 10
72	dr.	Papaverina	per	gr.	0 3	—
72	dr.	Papaverin. sulph.	per	gr.	0 3	—
132	100	Papaveris capsulæ Ang. ..	ea.	0 3	—	—
12	lb.	Papaveris capsulæ cont. ..	1 9	0 6	—	—
55	8 oz.	Papine (Battle) .. .. *C*	—	—	0 10	0 2
18	20	Paracodin tablets	doz.	1 7	—	—
8	lb.	Paraffinum durum	1 0	0 4	0 2	—
10	lb.	Paraffinum liquidum	1 4	0 6	0 2	—
		Paraffinum liquidum, pkd. ..	—	0 10	℥xij.	2 4
8	lb.	Paraffinum liquidum flavum ..	1 0	0 4	0 2	—
13	lb.	Paraffinum molle album ..	1 8	0 7	0 2	—
17	lb.	Paraffinum molle album ..	1-lb.	tins	2 2	—
8	lb.	Paraffinum molle flavum ..	1 0	0 4	0 2	—
11	lb.	Paraffinum molle flavum ..	1-lb.	tins	1 5	—
10	lb.	Paraffinum (toilet)	1 3	0 5	0 2	—
6	oz.	Paraformaldehydum	—	—	0 9	0 2
4	oz.	Paraldehydum	—	—	0 7	0 1

Cost		Pa—Pi	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
18	oz.	Paramidophenol hyd.	—	—	2 3	0 6
34	lb.	Parenol (alb.) B.P.C.	4 0	1 2	0 4	—
44	lb.	Parenol liq. (alb.) B.P.C.	5 6	1 7	0 5	—
96	lb.	Parogenum B.P.C.	—	2 0	0 7	—
66	lb.	Parogenum iodi B.P.C.	—	2 5	0 8	0 2
41	lb.	Parolein (B.W.)	5 0	1 3	0 4	0 1
14	oz.	Pasta bismuthi et iodoformi	—	—	2 0	0 4
15	lb.	Pasta zinci ox. co.	2 0	0 7	0 2	—
22	lb.	Pasta zinci et gelat. B.P.C.	2 9	0 10	0 3	—
30	lb.	Pasta zinci et ichtham. B.P.C.	3 11	1 1	0 4	—
60	lb.	Pastilles, fumigating	—	2 2	0 8	—
95	100	Pavon tablets *B, F*	doz.	1 6	—	—
6	gr.	Pelletierinæ tannas	per	gr.	1 0	—
102	lb.	Pepsencia (Fairchild)	—	3 6	1 0	0 2
66	8 oz.	Pepsin. c. bism. co. (Schacht)	—	4 1	1 1	0 2
66	8 oz.	Pepsin. liquid. (Schacht)	—	4 1	1 1	0 2
16	oz.	Pepsinum porci	—	—	2 4	0 4
17	oz.	Pepsin. (scale)	—	—	2 6	0 5
64	8 oz.	Peptenzyme elixir unstd.	—	4 0	1 0	0 2
64	oz.	Peptenzyme pwdr., unstd.	—	—	7 4	1 1
16	oz.	Peptonum siccum	—	—	2 4	0 4
58	5.0	Percaine crystals, vials	1 gm.	2 0	—	—
58	10	Percaine 1,200 amps.	6 6	per	box	—
42	lb.	Perichthol	5 3	1 6	0 6	0 1
33	lb.	Petroleum leve.	3 9	1 0	0 4	—
6	oz.	Phenacetinum	—	—	0 11	0 2
57	oz.	Phenalgin unstd.	—	—	—	1 5
51	oz.	Phenalgin tablets gr. 5 unstd.	doz.	1 0	—	—
15	oz.	Phenazonum	—	—	2 3	0 4
22	oz.	Phenazonum caff. cit.	—	—	3 3	0 6
20	oz.	Phenazoni salicylas	—	—	2 11	0 5
39	oz.	Phenobarbital *B*	—	—	—	0 10
39	oz.	Phenobarbital, solubile *B*	—	—	—	0 10
63	oz.	Phenocoli hydrochloridum	—	—	8 0	1 6
26	lb.	Phenol cryst.	3 3	1 0	0 4	0 1
72	lb.	Phenol (iodised)	—	—	0 9	0 2
19	lb.	Phenol. liquefact.	—	0 9	0 3	—
16	lb.	Phenol 2% alcoholic	2 0	0 7	0 2	—
7	oz.	Phenolphthaleinum	—	—	1 1	0 2
27	oz.	Phenylenediaminæ hyd.	—	—	4 0	0 7
24	oz.	Phenylhydrazinæ hydroch.	—	—	3 6	0 8
10	gm.	Phloroglucin.	per	gr.	0 · 2	—
5	oz.	Phosphoric anhydride	—	—	1 0	0 3
8	oz.	Phosphorus, amorph.	—	—	1 1	0 3
8	oz.	Phosphorus, yellow	—	—	1 1	0 3
8	gr.	Physostigmin sal. *B*	per	gr.	1 · 2	—
62	25 gm	Phytin	—	—	9 3	1 9
67.5	100	Phytin tablets	doz.	1 0	—	—
84	oz.	Phytolaccinum	—	—	12 4	2 0
60	dr.	Picrotoxinum	—	—	—	8 0
9	lb.	Pig powders P.L.F. I. *C*	—	½-oz.	3d. ea.	—
19	lb.	Pig powders P.L.F. II.	2 6	0 9	0 3	—
60	lb.	Pigmentum caseini B.P.C.	—	2 3	0 7	—
11	oz.	Pig. chrysarobini B.P.C.	—	—	3 4	0 6
36	lb.	Pig. iodi (Mandl)	—	1 5	0 5	—
33	lb.	Pig. iodi N.I.F.	—	1 4	0 5	—
48	lb.	Pig. iodi fort. N.I.F.	—	1 10	0 7	—
25	lb.	Pigmentum iodi meth.	—	1 0	0 4	—
48	lb.	Pigmentum iodi meth. fort.	—	1 10	0 7	—
7	oz.	Pig. iodoformi	—	—	1 2	—
8	oz.	Pig. salol	—	—	1 4	—
3	gr.	Pilocarpinæ hydrochloridum *B*	per	gr.	0 5	—
3	gr.	Pilocarpinæ nitras *B*	per	gr.	0 5	—
		Pilulæ				
63	lb.	Pil. aloes pulvis	—	2 4	0 8	0 2
66	lb.	Pil. aloes et asafetidæ pulvis	—	2 6	0 9	0 2
78	lb.	Pil. aloes et ferri pulvis	—	2 8	0 9	0 2

Cost		Pi—Po Pilulæ—(cont.)	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
72	lb.	Pil. aloes et myrrhæ pulvis	—	2 7	0 9	0 2
75	lb.	Pil. aloes socot. pulvis	—	2 9	0 10	0 2
18	50	Pil. Alophen (P.D. & Co.)	ea.	2 0	—	—
84	lb.	Pil. cambogiæ co. pulvis	—	3 0	0 10	0 2
64	lb.	Pil. cochiæ	—	2 2	0 7	0 1
108	lb.	Pil. colocynthidis co. pulvis	—	4 0	1 1	0 2
162	lb.	Pil. colocynthidis et hyoscy. pulvis *C*	—	5 10	1 7	0 3
52	lb.	Pil. conii co. B.P.C. *C*	—	2 0	0 7	0 1
24	lb.	Pil. ferri	—	1 0	0 4	0 1
15	oz.	Pil. ferri iodidi	—	—	2 3	0 4
114	lb.	Pil. galbani co. pulvis	—	5 0	1 3	0 3
78	lb.	Pil. hydrargyri pulvis	—	2 10	0 9	0 2
102	lb.	Pil. hyd. subchlor. co. pulvis	—	3 9	1 0	0 2
126	lb.	Pil. ipecacuanhæ c. scilla *B, ex F*	—	4 3	1 2	0 2
10	oz.	Pil. phosphori	—	—	1 6	0 3
8	oz.	Pil plumbi c. opio *B, ex F*	—	—	1 2	0 2
48	oz.	Pil. quininæ sulphatis	—	—	7 0	1 0
72	lb.	Pil. rhei co. pulvis	—	2 7	0 9	0 2
12	oz.	Pil. saponis co. pulvis *B, F*	—	—	1 9	0 3
21	oz.	Pil. scammonii co. pulvis	—	—	3 0	0 6
78	lb.	Pil. scillæ co. pulvis	—	2 9	0 10	0 2
57	gall.	Pine disinfecting fluid	1 0	per	pint	—
11	lb.	Pimentæ fructus	1 5	0 6	0 2	—
14	lb.	Pimentæ fructus pulvis	1 9	0 6	0 2	—
36	lb.	Piper album	4 6	1 4	0 5	—
36	lb.	Piperis albi pulvis	4 6	1 4	0 5	—
36	lb.	Piper longum	4 6	1 4	0 5	—
24	lb.	Piper nigrum extra	3 0	0 11	0 3	—
21	lb.	Piperis nigri pulvis	2 9	0 9	0 3	—
84	oz.	Piperazina	—	—	12 4	1 10
66	oz.	Piperina	—	—	8 9	1 3
54	6	Pitocin amps.	ea.	6 0	—	—
54	6	Pitressin	ea.	6 0	—	—
15	lb.	Pix Barbadense	2 0	0 9	—	—
21	lb.	Pix Burgundica ver.	2 8	0 9	0 3	—
15	lb.	Pix Burgundica fact.	1 9	0 6	0 2	—
16	lb.	Pix carbonis præp.	2 0	0 6	0 2	—
9	lb.	Pix liquida	1 3	0 5	0 2	—
66	gm.	Platini chloridum	per	gr.	0 8	—
81	oz.	Platini chloridi sol. 5 per cent.	—	—	11 9	1 9
12	gr.	Platinum foil or wire	per	gr.	1 9	—
13	lb.	Plumbi acetas pur.	1 8	0 7	0 2	—
11	lb.	Plumbi acetas coml.	1 5	0 5	0 2	—
13	lb.	Plumbi arsen. wash P.L.F. *A, B*	1 8	—	—	—
28	lb.	Plumbi carbonas pur.	3 6	1 0	0 4	0 1
22	oz.	Plumbi iodidum	—	—	3 3	0 6
48	lb.	Plumbi oleas (normal)	6 0	1 9	0 7	—
10	lb.	Plumbi oxidum (litharge)	1 3	0 5	0 2	—
12	lb.	Plumbi oxidum rubrum	1 6	0 6	0 2	—
28	oz.	Podophylli resina	—	—	4 1	0 7
90	lb.	Pot-pourri P.L.F.	11 3	3 3	0 11	—
		Potassium				
39	lb.	Potassa caustica (sticks)	4 10	1 5	0 5	—
18	lb.	Potassa caustica (black ash)	2 3	0 8	0 3	—
20	lb.	Potassa caustica (granular)	2 6	0 9	0 3	—
15	lb.	Potassa caustica lump coml.	2 0	—	—	—
15	lb.	Potassa sulphurata	2 0	0 7	0 2	—
21	lb.	Potassii acetas gran.	2 8	0 10	0 3	—
5	oz.	Potassii arsenas *A, B*	—	—	0 10	—
27	oz.	Potassii benzoas nat.	—	—	4 0	0 7
8	oz.	Potassii benzoas synth.	—	—	1 2	0 3
11	lb.	Potassii bicarbonatis pulvis	1 5	0 5	0 2	—
19	lb.	Potassii bichromas	2 5	0 9	0 3	—
12	lb.	Potassii bichrom. coml.	1 9	0 6	0 2	—
51	lb.	Potassii borotartras	6 6	1 10	0 7	—
31	lb.	Potassii bromidum gran.	3 10	1 2	0 4	—

Cost		Po—Pu	Selling Price			
d.	per	Potassium—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
15	lb.	Potassii carbonas	2 0	0 7	0 2	—
8	lb.	Potassii carbonas coml.	1 0	0 4	0 2	—
14	lb.	Potassii chloras. pulvis pur.	—	0 7	0 2	—
9	lb.	Potassii chloratis pulvis coml.	—	0 4	0 2	—
12	lb.	Potassii chloridum pur.	1 6	0 6	0 2	—
8	lb.	Potassii chloridum coml.	1 0	0 4	—	—
114	gm.	Potassii chloroplatinis	per	gr.	1 0	—
34	lb.	Potassii chromas	—	1 3	0 5	—
34	lb.	Potassii citras	—	1 3	0 5	0 1
42	lb.	Potassii citras eff. B.P.C.	5 3	1 6	0 5	0 1
48	lb.	Potassii cyanidum 40% *B*	6 0	1 9	0 7	0 2
42	lb.	Potassii ferricyanidum	5 3	1 6	0 5	0 1
42	lb.	Potassii ferricyanidum coml.	5 3	1 6	0 5	—
18	lb.	Potassii ferrocyanidum	2 3	0 8	0 3	—
5	oz.	Potassii formas	—	—	0 9	0 2
5	oz.	Potassii glyceroph. 50%	—	—	0 9	0 2
12	oz.	Potassii guaiacolsulphonas	—	—	1 9	0 3
48	oz.	Potassii hippuras	—	—	7 0	1 0
7	oz.	Potassii hypophosphis	—	—	1 1	0 2
93	lb.	Potassii iodidum	—	3 4	0 11	0 2
13	lb.	Potassii metasulphis	1 8	0 6	0 2	—
15	lb.	Potassii nitras	2 0	0 8	0 3	—
7	lb.	Potassii nitras coml.	0 11	0 3	0 1½	—
768	cwt.	Potassii nitras coml.	7 lb.	5 10	14 lb.	10 10
20	lb.	Potassii oxalas neut. *E*	—	0 9	0 3	0 1
20	lb.	Potassii permanganas	2 6	0 9	0 3	—
45	lb.	Potassii persulphas	—	1 4	0 5	0 1
45	lb.	Potassii phosphas	5 7	1 8	0 6	0 1
24	lb.	Potassii phosphas coml.	3 0	1 0	0 3	—
48	lb.	Potassii phosph. (tribasic)	—	1 9	0 6	—
12	oz.	Potassii salicylas	—	—	1 9	0 3
36	lb.	Potassii silicas fus.	—	1 4	0 5	—
15	oz.	Potassii succinas	—	—	2 3	0 4
13	lb.	Potassii sulphas pulv.	—	0 7	0 2	0 1
6	lb.	Potassii sulphas coml.	0 9	0 3	0 1	—
7	oz.	Potassii sulphis	—	—	1 1	0 2
5	oz.	Potassii sulphocarbolas	—	—	0 9	0 2
6	oz.	Potassii sulphocyanidum	—	—	0 11	0 2
39	lb.	Potassii tartras	4 10	1 5	0 5	0 1
16	lb.	Potassii tartras acidus	2 0	0 7	0 3	—
12	lb.	Potassii tartras acidus 92%	7 lb.	11 0	—	—
66	oz.	Procain. hyd.	—	—	9 8	1 5
12	gm.	Proflavinum	per	gr.	0 2	—
85	20	Prolan pellets		9 6	tube	
13	10	Prominal tablets		1 6	tube	
45	oz.	Protargol	—	—	—	1 1
22	oz.	Protargol granulate	—	—	3 3	0 6
21	lb.	Psyllii sem.	—	0 10	0 3	—
84	lb.	Pulv. acetanilidi co.	—	3 0	0 10	0 2
27	lb.	Pulv. alkalinus (Maclean's)	—	1 0	0 4	—
26	lb.	Pulv. aloes cap c. canella	—	0 11	0 4	—
48	lb.	Pulv. aloes c. canella (super.)	—	1 9	0 6	0 1
48	lb.	Pulv. amygdalæ co.	—	1 9	0 6	0 1
48	lb.	Pulv. antimonialis	—	—	0 6	0 1
264	lb.	Pulv. aromaticus co.	—	9 7	2 7	0 5
32	lb.	Pulv. bismuth. co. N.I.F.	—	1 2	0 4	—
54	lb.	Pulv. catechu co.	—	2 0	0 7	0 1
60	lb.	Pulv. cinnamomi co.	—	2 2	0 8	0 2
90	lb.	Pulv. conf. aromat.	—	3 3	0 11	0 2
16	lb.	Pulv. cretæ aromaticus	—	0 7	0 3	—
36	lb.	Pulv. cretæ aromat. c. op. *B*, ex *F*	—	1 4	0 5	0 1
48	oz.	Pulv. elaterini co.	—	—	7 0	1 3
15	lb.	Pulv. glycyrrhizæ co.	2 0	0 7	0 3	0 1
		Pulv. glycyrrh. co. 4-oz. kali	—	0 11	—	—
7	oz.	Pulv. ipecacuanhæ et opii *B*. ex *F*	—	—	1 1	0 2
36	lb.	Pulv. jalapæ co.	—	1 4	0 5	0 1
7	oz.	Pulv. kino co. *B*, ex *F*	—	—	1 1	0 2

Cost		Pu—Ro	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
27	lb.	Pulv. lobeliæ co. B.P.C.	—	1 0	0 4	—
10	oz.	Pulv. opii co. *B, F*	—	—	1 6	0 3
8	oz.	Pulv. pepsini co.	—	—	1 2	0 2
26	lb.	Pulv. pro mist. cretæ	3 3	1 0	0 4	0 1
30	lb.	Pulv. rhei co.	—	1 2	0 4	0 1
72	lb.	Pulv. scammonii co.	—	2 7	0 10	0 2
19	lb.	Pulv. seidlitz	ea.	3d.	—	—
24	lb.	Pulv. stramon. co. B.P.C.	—	1 0	0 4	—
33	lb.	Pulv. tragacanthæ co.	—	1 3	0 4	0 1
12	lb.	Pulv. zinc. amylo ac. bor.	1 6	0 6	—	—
28	oz.	Pyramidon	—	—	—	0 7
30	lb.	Pyrethri radicis pulvis	—	1 1	0 4	—
18	oz.	Pyridina pura	—	—	2 8	0 5
24	oz.	Pyrocatechin	—	—	3 6	0 6
39	oz.	Pyrogallol monoacet. sol.	—	—	5 9	1 0
36	oz.	Pyrogallol triacetas	—	—	5 3	1 0
		Q				
8	lb.	Quassiæ ligni rass.	1 0	0 4½	0 2	—
14	lb.	Quassiæ ligni pulvis.	—	0 7	0 3	0 1
108	dr.	Quassinum amorph.	—	—	—	15 0
48	lb.	Quebracho cortex	—	1 9	0 6	—
10	lb.	Quercus cortex	1 3	0 5	0 2	—
12	lb.	Quillaiæ cortex	—	0 6	0 2	—
15	lb.	Quillaiæ cortex contusus	2 0	0 7	0 2	—
18	lb.	Quillaiæ corticis pulvis	—	0 8	0 3	—
			Gr.x.			
96	oz.	Quinidina	0 5	—	—	2 0
69	oz.	Quinidinæ sulph.	0 4	—	—	1 6
69	oz.	Quinina	0 3	—	—	1 6
90	oz.	Quinin. acetylsalicylas	0 4	—	—	2 0
66	oz.	Quinin. ethylcarbonas	0 3	—	—	1 6
78	oz.	Quinin. glycerophosphas	0 4	—	—	1 8
90	oz.	Quinin. hydriodidum acidum	0 4	—	—	2 0
54	oz.	Quinin. hydrobromidum	0 3	—	—	1 2
54	oz.	Quinin. hydrobromid. acidum	0 3	—	—	1 2
54	oz.	Quinin. hydrochlor.-bi.	0 3	—	—	1 2
90	oz.	Quinin. hypophosphis	0 4	—	—	2 0
69	oz.	Quinin. phosphas	0 3	—	—	1 6
66	oz.	Quinin. salicylas	0 3	—	—	1 6
35	oz.	Quinin. sulphas	0 2	—	—	0 10
40	oz.	Quinin. sulphas acidus	0 2	—	—	0 11
58	oz.	Quinin. et ureæ hydrochl.	0 3	—	—	1 3
66	oz.	Quinin. urethane	—	—	8 9	1 6
87	oz.	Quinin. valerianas	0 4	—	—	1 8
		R				
11	lb.	Rapii semina	1 5	0 6	0 2	—
20	lb.	Red squill compound	2 6	0 9	0 3	—
8	lb.	Resina (amber)	1 0	0 4	0 1	—
11	lb.	Resin. flav. pulv.	1 5	0 6	0 2	—
11	oz.	Resorcinol	—	—	1 8	0 3
20	25c.c.	Radiostoleum	—	—	3 6	0 6
27	oz.	Resorcini acetas	—	—	4 0	0 8
28	lb.	Rhei rhizoma Ang. pulv.	—	1 0	0 4	—
264	lb.	Rhei rhiz. "E. I." elect.	—	9 5	2 9	0 5
210	lb.	Rhei rhiz. "E. I." (trimmed)	—	7 8	2 4	0 4
156	lb.	Rhei rhiz. "E. I." sec.	—	5 7	1 7	0 3
162	lb.	Rhei rhiz. "E. I." pulv. elect.	—	5 10	1 8	0 3
120	lb.	Rhei rhiz. "E. I." pulv. sec.	—	4 3	1 2	0 2
84	lb.	Rhei rhiz. "E. I." pulv.	—	3 0	0 10	0 2
63	dr.	Rhubidii iodidum	—	—	—	9 2
20	lb.	Ringworm oint. (vet.) P.L.F	2 6	0 9	—	—
14	lb.	Rosmarini folia	1 8	0 6	0 2	—
36	lb.	Rouge, jewellers'	4 6	1 4	0 5	—
192	lb.	Rosæ pet. Ang.	—	6 10	2 0	—
84	lb.	Rosæ pet. exot.	—	3 0	0 10	—

Cost d.	Cost per	Sa—Se	Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
		S				
54	oz.	Saccharinum 550	per	gr.	0 1	1 2
48	oz.	Saccharinum solubile	per	gr.	0 1	1 0
6	lb.	Saccharum pur. pulv. subtil. ..	—	0 2½	0 1	—
		Saccharum lactis (tins)	½ lb.	1 6	1 lb.	2 8
14	lb.	Saccharum lactis pulv.	1 9	0 7	0 2	—
18	lb.	Saccharum ustum Ang. ..	2 3	0 9	0 3	—
10	lb.	Saccharum ustum exot. ..	1 3	0 5	0 2	—
		Sachet powder opt. (var.) P.L.F.	—	—	1 4	—
		Sachet powder sec. P.L.F. ..	—	3 4	1 0	—
60	lb.	Safrol	—	2 2	0 9	0 2
24	lb.	Sal acetos. pulv. P.L.F. *E*	—	0 11	0 3	—
18	lb.	Sal acetos. pulv. .. *E*	—	0 8	0 3	—
14	lb.	Sal Carlsbad artif. N.F. ..	1 9	0 7	0 2	—
36	lb.	Sal Carol. fact. eff. pulv. ..	4 6	1 4	0 5	0 1
18	lb.	Sal Cheltenham artif.	2 3	0 8	0 3	—
33	lb.	Sal Harrogate, artif.	4 2	1 3	0 5	—
—	3 oz.	Sal hepatica	—	—	0 9	0 2
12	lb.	Sal Kissingen artif.	1 6	0 6	0 2	—
54	lb.	Sal limonis P.L.F. .. *E*	—	2 0	0 7	—
48	lb.	Sal limon. (non-toxic) P.L.F. ..	—	1 9	0 6	—
13	lb.	Sal prunella glob.	1 9	0 7	0 2	—
19	lb.	Sal prunella glob. parv. ..	2 4	0 9	0 3	—
18	lb.	Sal Vichy artif.	2 3	0 8	0 3	—
19	oz.	Salicinum	—	—	2 10	0 5
24	lb.	Saline effervesc. P.L.F. ..	3 0	1 0	0 3	—
45	oz.	Salipyrine	—	—	—	1 1
9	oz.	Salol	—	—	1 4	0 3
42	oz.	Salophen	—	—	6 2	1 6
24	lb.	Sambuci flores sicc.	3 0	0 11	0 3	—
48	lb.	Sandaraca	6 0	1 9	0 6	—
24	lb.	Sanguinariæ radix	—	1 0	0 4	—
27	dr.	Sanguinarin.	—	—	—	4 0
50	lb.	Sanguis draconis pulv. opt. ..	—	5 4	1 6	0 3
08	lb.	Sanguis draconis pulv. sec. ..	13 6	3 11	1 1	0 2
30	lb.	Santal. flav. lig. pulv.	3 6	1 0	0 4	—
27	dr.	Santoninum	per	gr.	0 2	4 0
18	lb.	Sapo albus pulv.	2 3	0 8	0 3	—
24	lb.	Sap. alc. sol. indust.	—	0 10	0 3	—
13	lb.	Sapo animalis	1 7	0 6	0 2	—
18	lb.	Sapo animal. pulv.	2 3	0 8	0 3	—
36	lb.	Sapo arsen. (taxid.) P.L.F. *B*	4 6	1 4	0 5	—
15	lb.	Sapo Cast. mottled	1 10	0 7	0 2	—
24	lb.	Sapo " coconut oil "	3 0	1 0	0 3	—
18	lb.	Sapo durus	2 3	0 8	0 3	—
28	lb.	Sapo durus pulv.	3 6	1 0	0 3	—
48	lb.	Sapo ethereal P.L.F.	—	1 8	0 7	—
74	lb.	Sapo Hebra rect.	—	6 2	1 8	0 3
24	lb.	Sapo kalinus	3 0	0 11	0 4	—
6	lb.	Sapo mollis viridis	2 0	0 7	0 2	—
9	lb.	Sapo mollis coml. opt.	1 2	0 4	—	—
6	lb.	Sapo Napol.	4 6	1 4	0 5	—
2	oz.	Saponinum	—	—	1 9	0 4
2	lb.	Sarsæ radix Jam.	5 3	1 6	0 5	0 1
1	lb.	Sarsæ radix Jam. incis. ..	6 3	1 11	0 6	0 1
8	lb.	Sassafras radix incis.	2 3	0 9	0 3	—
7	oz.	Scammoniæ resinæ pulv. ..	—	—	1 1	0 2
3	dr.	Scammoniæ virgin. pulv. ..	—	—	—	3 5
2	oz.	Scarlet red	—	—	6 2	1 0
0	lb.	Schlippe's salt	7 6	2 2	0 7	0 1
2	oz.	Scilla pulv.	—	—	0 4	0 1
6	100	Sedobrol tablets	doz.	2 4	—	—
2	gross	Seltzogene charges 3-pt. ..	doz.	2 3	—	—
2	gross	Seltzogene charges 5-pt. ..	doz.	4 6	—	—
3	lb.	Senegæ rad.	—	1 3	0 4	—
2	lb.	Senegæ rad. pulv.	—	1 6	0 5	—
4	lb.	Sennæ folia Alex. opt.	6 9	2 0	0 7	—

Cost d.	Cost per	Se—So	Selling Price 16 oz. s. d.	Selling Price 4 oz. s. d.	Selling Price 1 oz. s. d.	Selling Price 1 dr. s. d.
24	lb.	Sennæ fol. Alex. pulv.	3 0	0 11	0 4	—
30	lb.	Sennæ fol. Tinnev.	3 9	1 1	0 4	—
18	lb.	Sennæ fol. Tinnev. pulv. ..	2 3	0 8	0 3	—
96	lb.	Sennæ fructus Alex. (picked) ..	12 0	3 5	1 0	—
18	lb.	Sennæ fructus Tinnev. ..	2 3	0 8	0 3	—
54	lb.	Serpentariæ rhizoma	—	2 0	0 7	0 1
40	lb.	Sevum benzoatum	—	1 6	0 5	—
36	lb.	Sevum præparatum	—	1 5	0 5	—
11	oz.	Sevum phosphoratum	—	—	1 8	0 4
28	lb.	Shampoo pdr. (borax soap) ..	—	1 0	0 4	—
21	lb.	Shampoo pdr. (coconut soap) ..	2 8	0 10	0 3	—
36	lb.	Shellac alb.	4 6	1 4	0 5	—
26	lb.	Shellac aurant.	3 0	0 11	0 3	—
18	lb.	Shellac aurant. sec.	2 3	0 8	0 3	—
19	lb.	Sherbet P.L.F.	2 5	0 9	0 3	—
4	oz.	Silica pur. præcip.	—	—	0 8	—
6	lb.	Silica coml.	0 10	0 3	0 1	—
10	lb.	Sinapis albæ semina	1 3	0 5	0 2	—
		Sodium				
30	lb.	Soda caustica (sticks) pur. ..	3 9	1 2	0 4	—
11	lb.	Soda caustica (gran. or flake) ..	1 5	0 6	0 2	—
15	lb.	Soda lime	2 0	0 7	0 2	—
15	lb.	Sodii acetas pur. cryst. ..	1 10	0 7	0 2	—
18	oz.	Sodii acetylsalicylas	—	—	2 8	0 6
27	lb.	Sodii ammon. phos.	—	1 0	0 4	—
6	oz.	Sodii arsenas anhyd. .. *A, B*	—	—	0 11	0 2
30	oz.	Sodii benzoas nat.	—	—	4 5	0 8
36	lb.	Sodii benzoas artif.	—	1 4	0 5	—
6	lb.	Sodii bicarb. (Howards) ..	0 9	0 3	0 2	—
5	lb.	Sodii bicarb. opt. pulv. ..	0 8	0 3	0 1	—
		Sodii bicarb. opt. pkd.	—	0 4½	0 1½	—
4	lb.	Sodii bicarb. coml. pulv. ..	0 6	0 2	0 1	—
264	cwt.	Sodii bicarb. coml. pulv. ..	7 lb.	1 8	14 lb.	3 0
11	lb.	Sodii bichromas	1 6	0 6	0 2	—
15	lb.	Sodii bisulphas pur.	1 11	0 7	0 2	—
54	lb.	Sodii bitartras	6 9	2 0	0 7	0 1
35	lb.	Sodii bromidum	4 6	1 4	0 5	—
36	oz.	Sodii cacodylas .. .. *B*	—	—	5 3	0 9
3	lb.	Sodii carbolas	—	—	0 6	0 1
5	lb.	Sodii carbonas cryst.	0 8	0 3	0 1	—
8	lb.	Sodii carbonas exsic.	1 0	0 4	0 1	—
3	lb.	Sodii carbonas coml.	0 5	0 2	0 1	—
54	oz.	Sodii chaulmoogras	—	—	—	1 2
21	lb.	Sodii chlorate	2 8	0 9	0 3	—
10	lb.	Sodii chloridum pur.	1 3	0 6	0 2	—
14	oz.	Sodii cinnamas	—	—	2 0	0 4
35	lb.	Sodii citras	4 5	1 4	0 5	0 1
38	lb.	Sodii citro-tartras eff.	4 9	1 9	0 6	—
30	lb.	Sodii cyanid.	3 9	1 1	0 4	—
2	oz.	Sodii formas	—	—	0 4	0 1
9	oz.	Sodii glycerophos. pulv. ..	—	—	1 4	0 3
26	oz.	Sodii guaiacas	—	—	3 9	0 8
42	oz.	Sodii hippuras	—	—	6 2	1 0
54	oz.	Sodii hydnocarpas	—	—	8 0	1 4
26	lb.	Sodii hydroxid. sticks	—	1 0	0 4	—
6	oz.	Sodii hypophosphis	—	—	0 11	0 2
4.5	lb.	Sodii hyposulphis opt.	0 8	0 3	0 1	—
3	lb.	Sodii hyposulphis (photog.) ..	0 5	—	—	—
11	oz.	Sodii iodidum	—	—	1 8	0 3
6	lb.	Sodii lactas (syrupy)	—	—	1 3	0 3
7.5	oz.	Sodii lith. cit. co.	—	—	1 2	0 2
21	lb.	Sodii manganas coml.	2 9	0 9	0 3	—
18	lb.	Sodii metasulphis	2 3	0 8	0 3	—
54	oz.	Sodii morrhuas	—	—	8 0	1 4
18	lb.	Sodii nitras pur.	—	0 8	0 3	—
4.5	lb.	Sodii nitras coml.	0 7	0 3	0 1	—
18	lb.	Sodii nitris pur. cryst.	—	0 8	0 5	0 1

Cost		So—Sp	Selling Price			
d.	per	Sodium—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
24	oz.	Sodii nitroprussidum	—	—	3 6	0 7
90	oz.	Sodii nucleinas	—	—	12 10	1 10
42	lb.	Sodii oleas	—	1 6	0 5	—
26	lb.	Sodii oxalas .. .. *C*	—	1 0	0 4	—
24	lb.	Sodii perboras	3 0	0 11	0 4	0 1
39	lb.	Sodii peroxidum	—	1 5	0 5	0 1
66	lb.	Sodii persulphas	—	2 4	0 8	0 2
13	lb.	Sodii phosphas " pea " ..	1 9	0 6	0 2	—
14	lb.	Sodii phosphas " feathery " ..	2 0	0 8	0 2	—
16	lb.	Sodii phosph. pulv.	2 3	0 8	0 3	—
22	lb.	Sodii phosph. pulv. exsic. ..	—	0 10	0 3	—
24	lb.	Sodii phosph. acidus	—	0 11	0 4	—
36	lb.	Sodii phosph. eff.	4 6	1 4	0 5	—
24	lb.	Sodii phosph. (tribasic) ..	—	1 0	0 4	—
17	lb.	Sodii et potas. tart. pulv. ..	2 2	0 8	0 3	—
18	lb.	Sodii pyrophosph.	2 3	0 9	0 3	—
32	lb.	Sodii salicylas cryst.	—	1 2	0 4	0 1
30	oz.	Sodii salicylas nat.	—	—	4 5	0 8
4.5	lb.	Sodii silicatis solut. (wgt.) ..	0 8	0 3	—	—
36	lb.	Sodii stearas	—	1 4	0 5	—
18	oz.	Sodii succinas	—	—	2 8	0 6
5	lb.	Sodii sulphas " pea "	0 8	0 3	0 2	—
5	lb.	Sodii sulphas " feathery " ..	0 9	0 3	0 1	—
6	lb.	Sodii sulph. pulv.	0 10	0 4	0 1	—
7	lb.	Sodii sulph. pulv. exsic. ..	1 0	0 5	0 2	—
216	cwt.	Sodii sulph. coml. cryst. ..	0 4	—	7 lb.	1 8
294	cwt.	Sodii sulph. coml. pulv. ..	0 5	—	7 lb.	2 4
27	lb.	Sodii sulph. eff.	3 6	1 0	0 4	—
176	cwt.	Sodii sulph. vet.	7 lb.	1 5	14 lb.	2 8
21	lb.	Sodii sulphidum cryst.	—	0 9	0 3	—
5	lb.	Sodii sulphis	0 9	0 3	0 1	—
36	lb.	Sodii sulphocarbolatis pulv. ..	—	1 4	0 5	0 1
6	oz.	Sodii sulphocyanid.	—	—	0 9	0 2
36	lb.	Sodii tartras (neutral)	—	1 4	0 5	0 1
18	oz.	Sodii tauroglycocholas B.P.C. ..	—	—	2 8	0 5
66	lb.	Sodii tungstas pur.	—	—	0 8	0 2
20	oz.	Sodii valerianas	—	—	2 11	0 5
108	lb.	Sol. ætheris nitrosi (1-7) ..	—	3 6	1 0	—
129	oz.	Sozoiodol, hydrarg.	—	—	—	2 2
54	oz.	Sozoiodol, zinc.	—	—	—	1 4
12	dr.	Sparteinæ sulphas .. *B*	—	—	—	1 9
72	lb.	Spigelia	—	2 7	0 9	0 2
		Spiritus				
75	lb.	Spiritus ætheris	—	2 5	0 8	0 2
105	lb.	Spt. ætheris comp.	—	3 6	0 11	0 2
67	lb.	Spt. ætheris nitrosi	7 6	2 2	0 7	0 1
24	lb.	Spt. ætheris nit. substit. P.L.F.	3 0	—	—	—
52	lb.	Spt. ammoniæ aromaticus ..	5 9	1 7	0 6	0 1
		Spt. ammon. ar. pkd. (std. bot.)	—	2 6	℥ij.	1 6
96	lb.	Spt. ammoniæ fetidus	—	3 2	0 10	0 2
24	oz.	Spt. anisi	—	—	3 4	0 6
66	lb.	Spt. armoraciæ co.	—	2 2	0 8	0 2
96	lb.	Spt. cajuputi	—	3 2	0 11	0 2
78	lb.	Spt. camphoræ	—	2 7	0 9	0 2
68	lb.	Spt. chloroformi	—	2 2	0 8	0 2
33	oz.	Spt. cinnamomi	—	—	4 4	0 8
102	lb.	Spt. juniperi	—	3 5	1 0	0 2
18	oz.	Spt. juniperi co. P.L.	—	—	2 6	0 5
630	lb.	Spt. lavandulæ Ang.	—	—	4 9	0 9
426	lb.	Spt. lavandulæ exot.	—	15 0	4 2	0 7
32	oz.	Spt. menthæ pip. Ang. ..	—	—	4 3	0 8
312	lb.	Spt. menthæ pip. exot.	—	10 6	2 9	0 5
26	oz.	Spt. myristicæ	—	—	3 9	0 7
126	lb.	Spt. nucis juglandis	—	4 0	1 1	0 2
300	lb.	Spt. rosmarini exot.	—	10 0	2 8	0 5
62	lb.	Spt. saponatus	6 9	2 0	0 7	—

Cost		Sp—Sy	Selling Price			
d.	per	Spiritus—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 d
24	lb.	Spt. saponis kalini meth. ..	3 0	0 11	0 3	—
72	gal.	Spt. sick-room (Surgical) ..	pint	1 2	—	—
54	gal.	Spt. vini meth. 64 o.p. (min'l)..	0 10	0 3	0 1	—
41	gal.	Spt. vini meth. 64o.p.(10gal.lots)	pint	0 6	—	—
29	gal.	Spt. vini meth. 64 o.p. (indust.) (10 gall. lots)	pint	0 7	gal.	4
40	gal.	Spt. vini meth. (indust.) 64 o.p.	pint	0 8	—	—
28	80	Stannoxyl tablets, unstd. ..	doz.	0 6	—	—
57	lb.	Stanni oxid. pulv. coml. opt. ..	7 2	2 1	0 8	—
66	lb.	Stannum gran. pur.	8 3	2 4	0 8	0
45	lb.	Staphisagria sem.	—	1 7	0 6	—
54	lb.	Staphisagria sem. pulv... ..	—	1 10	0 7	—
13	gm.	Stovaine	—	—	—	—
18	lb.	Stramonii folia	2 3	0 8	0 3	—
18	lb.	Stramonii fol. pulv. .. *C*	2 3	0 8	0 3	—
6	oz.	Strontii bromidum cryst. ..	—	—	0 11	0
8	oz.	Strontii bromid. exsic.	—	—	1 2	0
20	oz.	Strontii iodidum	—	—	3 0	0
18	oz.	Strontii lactas	—	—	2 8	0
17	lb.	Strontii nitras coml. pulv. ..	2 3	0 8	0 3	—
18	oz.	Strontii salicylas	—	—	2 8	0
9	gr.	Strophanthinum .. *B*	per	gr.	1 4	—
53	oz.	Strychnina cryst. .. *B*	—	—	7 9	1 2
53	oz.	Strych. pulv. .. .. *B*	—	—	7 9	1 2
50	oz.	Strych. hydrochloridum *B*	—	—	7 4	1 1
50	oz.	Strych. nitras .. .. *B*	—	—	7 4	1 1
50	oz.	Strych. sulphas .. *B*	—	—	7 4	1 1
27	20	Stypticin tablets .. *B*	doz.	1 10	—	—
29	20	Styptol tablets .. .. *B*	doz.	2 1	—	—
61	oz.	Styracol	—	—	—	1 6
84	lb.	Styrax præparatus	—	3 1	0 11	0 2
48	lb.	Succus allii	—	1 9	0 6	—
39	lb.	Succus belladonnæ .. *C*	—	1 5	0 5	—
38	lb.	Succus conii .. .. *C*	—	1 5	0 5	—
48	lb.	Succus digitalis .. .. *C*	—	1 10	0 7	—
42	lb.	Succus glycyrrhizæ (Solazzi) ..	—	1 6	0 5	—
16	lb.	Succus glycyrrhizæ (block) ..	2 0	0 7	0 3	0 1
36	lb.	Succus hyoscyami .. *C*	—	1 4	0 5	—
104	gal.	Succus limettæ	1 4	0 6	0 2	—
102	gal.	Succus limonis	1 6	0 6	0 2	—
32	lb.	Succus scoparii	—	1 3	0 5	—
32	lb.	Succus taraxaci	—	1 3	0 5	—
28	oz.	Sulphonal .. .. *C*	—	—	4 1	0 7
9	lb.	Sulphur lotum	1 2	0 4	0 1½	—
12	lb.	Sulphur præcipitatum	—	0 6	0 2	—
5	lb.	Sulphur rotundum	0 9	0 3	0 1	—
6	lb.	Sulphur sublimatum	0 9	0 3	0 1	—
264	cwt.	Sulphur sublimatum sec. ..	7 lb.	2 1	14 lb.	3 10
5	lb.	Sulphur vivum	0 9	0 3	—	—
312	cwt.	Sulphur vivum	7 lb.	2 4	—	—
18	lb.	Sulphur hair wash P.L.F. ..	—	8 oz.	1 4	—
6	lb.	Sulphur wash P.L.F.	1 0	—	—	—
26	lb.	Sulphuris chloridum (liq.) ..	—	1 6	0 6	—
20	oz.	Sulphuris iodidum	—	—	3 0	0 6
		Suppositoria (*see* Pricing Prescriptions)				
		Syrupi				
8	lb.	Syrupus	1 6	0 6	0 2	—
21	lb.	Syr. ac. hydriodici	—	1 0	0 4	—
28	lb.	Syr. alii	—	1 6	0 5	—
16	lb.	Syr. althææ	—	0 10	0 4	—
24	lb.	Syr. anisi	—	1 3	0 5	—
42	lb.	Syr. apomorphinæ B.P.C. *C*	—	2 0	0 7	0 1
78	lb.	Syr. aromaticus	—	3 7	1 0	0 2
33	lb.	Syr. aurantii	—	1 7	0 5	—

Sy

Cost d.	per	Syrupi—(cont.)	Selling Price 16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
24	lb.	Syr. aurantii floris	—	1 2	0 4	—
54	lb.	Syr. bromoformi (Martind.) ..	—	2 3	0 8	—
27	lb.	Syr. butyl-chloral hydratis ..	—	1 4	0 7	0 1
28	lb.	Syr. calcii chlor. B.P.C. ..	—	1 6	0 6	—
18	lb.	Syr. calcii hypophosphitis ..	—	1 0	0 4	—
16	lb.	Syr. calcii lactophosphatis ..	—	0 10	0 4	0 1
22	lb.	Syr. calcii lactophosphatis c. ferro	—	1 2	0 4	—
18	lb.	Syr. camphoræ co. .. C	—	0 10	0 4	—
54	lb.	Syr. cascaræ aromaticus ..	—	2 10	0 10	0 2
24	lb.	Syr. chloral C	—	1 1	0 4	0 1
48	lb.	Syr. cocillanæ co. .. C	—	2 2	0 7	0 1
37	16 oz.	Syr. cocillanæ co. (P.D.) C	—	3 3	0 11	0 2
33	lb.	Syr. codeinæ phosphatis C	—	1 6	0 5	0 1
27	lb.	Syr. croci B.P.C.	—	1 4	0 5	0 1
42	lb.	Syr. cydoniæ	—	2 0	0 7	—
48	lb.	Syr. eucalypti gummi	—	2 2	0 7	0 1
24	lb.	Syr. ferri bromidi	—	1 3	0 5	0 1
51	lb.	Syr. ferri bromidi c. quin. ..	—	2 4	0 8	0 2
48	lb.	Syr. ferri bromidi c. quin. et strych. C	—	2 2	0 8	0 2
9	lb.	Syr. ferri dial.	—	1 0	0 4	—
20	lb.	Syr. ferri hypophosphitis ..	—	1 0	0 4	—
8	lb.	Syr. ferri iodidi	—	0 10	0 3	—
24	lb.	Syr. ferri lactophosphatis ..	—	1 3	0 5	—
5	lb.	Syr. ferri phosphatis	2 9	0 10	0 4	—
2	lb.	Syr. ferri phosphatis co. ..	2 3	0 9	0 3	—
		Syr. ferri phosphatis co. pkd. ..	—	1 0	℥ viij	1 9
8	lb.	Syr. ferri phosphatis c. mang. ..	—	1 6	0 5	—
2	lb.	Syr. ferri phosphatis c. quin. ..	—	1 7	0 5	—
8	lb.	Syr.ferri phosph.c.quin.et strych.	—	0 10	0 4	—
21	lb.	Syr. fici	3 4	1 0	0 4	—
0	lb.	Syr. format. co... .. C	—	1 6	0 5	—
2	lb.	Syr. glucosi	—	0 8	0 3	—
3	lb.	Syr. glycerophosphatum flavus..	5 9	1 8	0 6	0 1
4	lb.	Syr. glyceroph. c. form. B.P.C.	4 0	1 3	0 4	—
7	lb.	Syr. glycerophos. co. B.P.C. C	2 10	0 11	0 4	—
8	lb.	Syr. glycerophosph. co. c. medulla rub. C	8 0	2 4	0 8	0 2
4	lb.	Syr. glycerophos. co. (Robin) C	—	1 3	0 4	—
24	lb.	Syr. hemidesmi	—	1 3	0 4	—
72	lb.	Syr. hydrobrom. co. (Hewlett)..	—	3 5	0 11	0 2
3	lb.	Syr. hypophos. co. B.P.C. C	2 2	0 8	0 3	—
		Syr. hypophos. co. pkd. ..	—	1 0	℥ ij.	0 8
6	lb.	Syr. iodotannicus	—	1 10	0 7	0 1
28	lb.	Syr. ipecacuanhæ	—	1 3	0 5	—
21	lb.	Syr. limonis	3 6	1 0	0 4	—
8	lb.	Syr. marrubii	3 3	1 0	0 4	—
3	lb.	Syr. mori	5 6	1 9	0 6	—
6	lb.	Syr. papaveris albæ .. C	—	0 10	0 4	—
8	lb.	Syr. picis liquidæ	—	1 0	0 4	—
0	lb.	Syr. pini B.P.C.	—	1 5	0 5	—
6	lb.	Syr. pruni cerasi	—	1 9	0 6	—
2	lb.	Syr. pruni serot	—	0 8	0 3	—
9	lb.	Syr. quininæ hypophositis ..	—	2 0	0 7	—
9	lb.	Syr. quininæ iodidi	—	2 0	0 7	—
9	lb.	Syr. quininæphosph.	—	2 0	0 7	—
7	lb.	Syr. rhamni	—	0 10	0 4	—
0	lb.	Syr. rhamni frang.	—	1 6	0 5	—
4	lb.	Syr. rhei..	—	0 10	0 3	—
6	lb.	Syr. rhœados	2 8	0 10	0 4	—
21	lb.	Syr. ribis nig.	—	1 0	0 4	0 1
1	lb.	Syr. ribis rub.	—	2 6	0 8	0 2
3	lb.	Syr. robor. (Roberts), unstd. fl.	—	2 3	0 7	0 2
6	lb.	Syr. rosæ	—	1 6	0 5	—
5	lb.	Syr. rubi fructicosi	—	1 6	0 5	—
7	lb.	Syr. rubi idæi	—	1 3	0 4	—
7	lb.	Syr. rutæ	—	1 3	0 4	—
1	lb.	Syr. scillæ	—	0 8	0 3	—

Sy—Th

Cost d.	per	Syrupi—(cont.)	Selling Price 16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
38	lb.	Syr. senegæ	—	1 10	0 7	—
30	lb.	Syr. sennæ Alex.	—	1 5	0 5	—
18	lb.	Syr. sennæ	—	0 11	0 4	—
30	lb.	Syr. sennæ fruct. Alex. ..	—	1 5	0 5	0 1
22	lb.	Syr. tamarindi	—	1 1	0 4	—
11	lb.	Syr. tolutanus	—	0 8	0 3	—
21	lb.	Syr. triplex B.P.C. .. C	—	1 1	0 4	—
24	lb.	Syr. tussilaginis	—	1 4	0 5	—
16	lb.	Syr. violæ	—	0 10	0 4	—
15	lb.	Syr. zingiberis	—	0 10	0 3	—
		T				
104	oz.	Taka diastase (P.D.)	—	—	13 0	2 0
36	4 oz.	Taka diastase elixir	—	4 6	1 2	0 2
32	4 oz.	Taka diastase liq.	—	4 0	1 0	0 2
77	100	Taka diastase tablets gr. 2½ ..	doz.	1 3	—	—
22	ea.	Takazyma	2 9	each	—	—
18	lb.	Talcum opt.	2 3	0 8	0 2½	—
5.5	lb.	Talcum coml.	0 8	0 2½	0 1	—
10	lb.	Tallow	1 3	0 5	0 1½	—
38	lb.	Tamarindi pulpa	4 9	1 5	0 5	—
17	lb.	Tamarindus W.I.	2 3	0 8	0 3	—
24	oz.	Tannalbin	—	—	3 6	0 6
20	20	Tannalbin tablets gr. 7½ ..	doz.	1 6	—	—
24	25 gm	Tannoform	—	—	—	0 7
26	lb.	Taraxaci radix Ang. incis. ..	3 3	1 0	0 4	—
36	lb.	Terebenum	—	1 3	0 5	—
72	lb.	Terebinth. Canad.	—	2 7	0 9	—
14	oz.	Terebinth. chia.	—	—	2 0	0 4
15	lb.	Terebinth. Venet. fact. ..	2 0	0 8	0 3	—
32	lb.	Terebinth. Venet. ver.	4 0	1 2	0 4	—
6	oz.	Terpini hydras	—	—	0 11	0 2
6	oz.	Terpineol	—	—	1 0	0 2
5	oz.	Terpinol..	—	—	0 9	0 2
30	lb.	Terra rosæ	3 9	1 2	0 4	—
108	oz.	Tetronal C	—	—	—	2 10
72	oz.	Thallii acetas	—	—	—	1 8
189	oz.	Thallin. sulph.	—	—	—	5 8
90	6	Theelin ampoules 1.0	10 0	per	box	—
90	6	Theelin amps. in oil	10 0	per 6	amps.	—
15	oz.	Theobromina	—	—	2 3	0 4
28	oz.	Theobrominæ acetylsal. ..	—	—	4 1	0 7
14	oz.	Theobrominæ-sod. acet. ..	—	—	2 0	0 4
12	oz.	Theobrominæ-sod. sal. ..	—	—	1 9	0 3
22	oz.	Theobromin. et sodii benz. ..	—	—	3 3	0 7
39	oz.	Theobromin. et sodii iod. ..	—	—	5 9	0 10
24	oz.	Theobromin. salicyl	—	—	3 6	0 6
144	oz.	Theocinæ-sod. acet.	—	—	—	3 5
58	50	Theominal tablets	doz.	2 2	—	—
96	oz.	Theophyllin.-sod. acet. ..	—	—	—	2 0
6	lb.	Theriaca	—	—	0 3	0 1
33.6	50c.c.	Thilocologne	3 6	per	tube	—
37.6	100cc	Thilocologne	4 9	per	tube	—
65	oz.	Thiocol.	—	—	—	1 7
43	6 oz.	Thiocol syrup	—	—	0 11	0 2
27	25	Thiocol tablets	doz.	1 8	—	—
28	oz.	Thioform	—	—	3 6	0 8
60	oz.	Thiol	—	—	7 6	1 6
30	gm.	Thiol. amino. methyl. glyox. hyd.	0 4	per	grain	—
30	oz.	Thiosinamina	—	—	4 3	0 8
12	oz.	Thio-urea	—	—	1 9	0 3
24	oz.	Thorii nitras pur.	—	—	3 6	0 6
18	lb.	Thus	2 3	0 8	0 3	—
12	oz.	Thymol	—	—	1 9	0 3
84	oz.	Thymol carbonas	—	—	12 4	1 0
36	oz.	Thymol iodidum	—	—	5 3	0 9
42	oz.	Thyroideum	—	—	6 4	1 0
24	lb.	Tiliæ flores	3 0	0 11	0 3	—
84	lb.	Thymotussin	—	3 3	0 10	—

Cost		Ti	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
		Tincturæ				
68	lb.	Tr. aconiti .. .. *B*	—	2 5	0 9	0 2
93	lb.	Tr. aconiti Fleming .. *B*	—	3 3	0 11	0 2
87	lb.	Tr. adonis vernalis	—	3 0	0 10	0 2
9	oz.	Tr. alii	—	—	1 4	0 3
45	lb.	Tr. aloes	—	1 7	0 5	0 1
84	lb.	Tr. aloes co. B.P.C.	—	3 3	0 11	0 2
57	lb.	Tr. ammoniæ co. B.P.C. ..	7 0	2 0	0 7	—
75	lb.	Tr. anthemidis	—	2 8	0 9	0 2
84	lb.	Tr. antiperiodica B.P.C. *C*	—	3 0	0 10	0 2
80	lb.	Tr. apocyni	—	2 10	0 10	0 2
42	lb.	Tr. arnicæ florum	5 3	1 6	0 6	0 1
72	lb.	Tr. arnicæ radicis	9 0	2 7	0 9	0 2
72	lb.	Tr. asafetidæ	—	2 5	0 8	0 2
210	lb.	Tr. aurantii	—	7 0	2 0	0 4
282	lb.	Tr. aurantii dulcis	—	9 6	2 5	0 4
63	lb.	Tr. belladonnæ .. *C*	—	2 3	0 8	0 2
64	lb.	Tr. benzoini comp.	7 4	2 2	0 7	0 1
78	lb.	Tr. benzoini simp.	—	2 7	0 8	0 2
98	lb.	Tr. berberidis	—	3 2	0 11	0 2
75	lb.	Tr. boldo	—	2 9	0 9	0 2
68	lb.	Tr. bryoniæ	—	2 5	0 8	0 2
69	lb.	Tr. buchu	—	2 4	0 8	0 2
96	lb.	Tr. calendulæ	—	3 4	0 11	0 2
54	lb.	Tr. calumbæ	—	1 10	0 7	0 1
48	lb.	Tr. camphoræ co. .. *C*	—	1 6	0 5	0 1
32	oz.	Tr. cannabis ind. .. *B, F*	—	—	4 8	0 8
84	lb.	Tr. cantharidini .. *C*	—	3 0	0 10	0 2
92	lb.	Tr. cantharidis P.B. '98 *C*	—	3 3	0 11	0 2
102	lb.	Tr. cantharidis acet. .. *C*	—	3 7	1 0	0 2
52	lb.	Tr. capsici	—	1 9	0 7	0 1
96	lb.	Tr. capsici fortior B.P.C. ..	—	3 4	1 0	0 2
84	lb.	Tr. cardamomi	—	3 0	0 10	0 2
48	lb.	Tr. cardamomi co.	—	1 9	0 6	0 1
108	lb.	Tr. carminativa	—	4 0	1 1	0 2
86	lb.	Tr. cascaræ	—	3 0	0 11	0 2
90	lb.	Tr. cascarillæ	—	3 2	0 11	0 2
16	oz.	Tr. castorei	—	—	2 4	0 4
42	lb.	Tr. catechu	—	1 6	0 6	0 1
80	lb.	Tr. caulophylli	—	2 10	0 9	0 2
11	oz.	Tr. cerei B.P.C.	—	—	1 8	0 3
60	lb.	Tr. chiratæ	—	2 2	0 7	0 1
68	lb.	Tr. chloroformi comp.	—	2 6	0 9	0 2
38	lb.	Tr. chlor. et morph. B.P.C. *B*	—	1 6	0 6	0 1
144	lb.	Tr. chlorof. et morph. co. *B, F*	—	—	1 8	0 3
57	lb.	Tr. cimicifugæ	—	2 0	0 7	0 1
69	lb.	Tr cinchonæ	—	2 5	0 8	0 2
69	lb.	Tr. cinchonæ co.	—	2 5	0 8	0 2
23	oz.	Tr. cinnamomi	—	—	3 5	0 6
69	lb.	Tr. cinnamomi co.	—	2 5	0 9	0 2
84	lb.	Tr. cocæ .. .. *B, F*	—	3 0	0 10	0 2
15	oz.	Tr. cocci	—	—	2 3	0 4
63	lb.	Tr. colchici .. .. *C*	—	2 2	0 8	0 2
68	lb.	Tr. colchici sem. B.P. '98 ..	—	2 2	0 7	0 1
84	lb.	Tr. colchici cormi .. *C*	—	3 0	0 10	0 2
84	lb.	Tr. collinsoniæ canad.	—	3 0	0 10	0 2
11	oz.	Tr. colocynthidis	—	—	1 8	0 3
90	lb.	Tr. condurango	—	3 1	0 11	0 2
8	oz.	Tr. conii .. .. *C*	—	—	1 2	0 2
7	oz.	Tr. convallariæ	—	—	1 1	0 2
120	lb.	Tr. coto	—	4 3	1 2	0 2
13	oz.	Tr. croci	—	—	1 10	0 4
9	oz.	Tr. cubebæ	—	—	1 4	0 3
26	oz.	Tr. curcumæ	—	—	3 9	0 7
86	lb	Tr. cuspariæ	—	3 0	0 10	0 2
81	lb	Tr. damianæ	—	2 10	0 11	0 2
10	oz.	Tr. daturæ sem. .. *C*	—	—	1 6	0 3
66	lb.	Tr. digitalis .. .. *C*	—	2 5	0 9	0 2

Cost		Ti Tincturæ—(cont.)	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
9	oz.	Tr. droseræ rot.	—	—	1 4	0 3
72	lb.	Tr. ergotæ B.P. '85 .. *B*	—	2 7	0 9	0 2
132	lb.	Tr. ergotæ ætherea .. *B*	—	4 9	1 3	0 3
78	lb.	Tr. ergotæ ammoniata .. *B*	—	2 10	0 10	0 2
7	oz.	Tr. eucalypti fol.	—	—	1 1	0 2
9	oz.	Tr. eucalypti gum.	—	—	1 4	0 3
7	oz.	Tr. euonymi	—	—	1 1	0 2
10	oz.	Tr. euonymin. virid.	—	—	1 5	0 3
72	lb.	Tr. euphorbiæ	—	2 7	0 9	0 2
54	lb.	Tr. ferri acetatis	—	2 0	0 7	0 1
21	lb.	Tr. ferri perchloridi	2 9	0 11	0 4	0 1
51	lb.	Tr. ferri pomati	—	1 10	0 6	0 1
84	lb.	Tr. gallæ	—	3 0	0 10	0 2
54	lb.	Tr. gelsemii .. .. *C*	—	2 0	0 7	0 1
42	lb.	Tr. gentianæ co.	5 2	1 5	0 5	0 1
7	oz.	Tr. gossypii	—	—	1 1	0 2
7	oz.	Tr. grindeliæ	—	—	1 1	0 2
81	lb.	Tr. guaiaci	—	2 10	0 10	0 2
81	lb.	Tr. guaiaci ammoniata	—	3 0	0 10	0 2
12	oz.	Tr. guaranæ	—	—	1 9	0 3
50	lb.	Tr. hamamelidis	—	1 9	0 7	0 1
99	lb.	Tr. hellebori nigri	—	3 7	1 0	0 2
15	oz.	Tr. hibisci	—	—	2 3	0 4
81	lb.	Tr. hydrastis .. .. *C*	—	2 9	0 9	0 2
66	lb.	Tr hyoscyami .. .. *C*	—	2 4	0 8	0 2
9	oz.	Tr. ignatiæ amaræ .. *C*	—	—	1 4	0 3
200	lb.	Tr iodi ætherea	—	7 0	1 10	0 4
75	lb.	Tr. iodi decolorata	—	2 8	0 9	0 2
96	lb.	Tr. iodi decolorat. fort. B.P.C.	—	3 5	0 11	0 2
30	lb.	Tr. ipecacuanhæ	—	1 1	0 4	—
8	oz.	Tr. ipecacuanhæ et opii *B, F*	—	—	1 2	0 2
25	oz.	Tr. iridis	—	—	3 8	0 7
54	lb.	Tr. jaborandi .. .. *C*	—	2 0	0 7	0 1
78	lb.	Tr. jalapæ	—	2 7	0 9	0 2
78	lb.	Tr. jalapæ co.	—	2 7	0 9	0 2
66	lb.	Tr. kino	—	2 4	0 8	0 2
66	lb.	Tr kolæ	—	2 4	0 8	0 2
60	lb.	Tr. krameriæ	—	2 2	0 8	0 2
10	oz.	Tr. laricis	—	—	1 6	0 3
87	lb.	Tr. lavandulæ co.	—	3 2	0 11	0 2
204	lb.	Tr. limonis	—	7 3	2 2	0 4
62	lb.	Tr lobeliæ .. .. *C*	—	2 2	0 7	0 1
84	lb.	Tr. lobeliæ ætherea .. *C*	—	3 0	0 10	0 2
66	lb.	Tr. lupuli	—	2 4	0 9	0 2
14	oz.	Tr. lycopodii	—	—	2 0	0 4
7	oz.	Tr. maticæ	—	—	1 1	0 2
87	lb.	Tr. myrrhæ	—	3 1	0 11	0 2
69	lb.	Tr. myrrhæ co. vet.	8 6	2 5	0 9	—
90	lb.	Tr. myrrhæ et boracis P.L.F. ..	11 3	3 0	0 11	0 2
108	lb.	Tr. myrrhæ et boracis B.P.C. ..	—	4 0	1 1	0 2
262	lb.	Tr myrrhæ et boracis c. eau de Cologne P.L.F.	—	8 6	2 3	—
45	lb.	Tr. nucis vomicæ .. *C*	—	1 8	0 6	0 1
183	lb.	Tr. odontalg. P.L.F. .. *C*	—	—	1 8	0 4
72	lb.	Tr. opii .. .. .. *B, F*	—	2 7	0 9	0 2
69	lb.	Tr. opii B.P. '98 .. *B, F*	—	2 5	0 8	0 2
72	lb	Tr. opii ammoniata .. *C*	—	2 7	0 9	0 2
54	lb.	Tr. opii aq. (1% morph.) *B, F*	—	2 0	0 7	0 1
180	lb	Tr. opii crocata B.P.C. *B, F*	—	6 5	1 10	0 4
90	lb.	Tr. opii deod. U.S.P. .. *B, F*	—	3 2	0 10	0 2
36	lb.	Tr. persionis B.P.C.	—	1 4	0 5	0 1
13	oz.	Tr. phosphori co.	—	—	2 0	0 4
104	lb.	Tr. podophylli	—	3 9	1 1	0 2
84	lb.	Tr. podophylli ammoniata ..	—	3 0	0 10	0 2
57	lb.	Tr pruni virginianæ	—	2 0	0 7	0 1
69	lb.	Tr. pulsatillæ	—	2 6	0 9	0 2
84	lb.	Tr. pyrethri	—	2 10	0 11	0 2
86	lb.	Tr. pyrethri florum	—	3 0	0 10	0 2

Cost		Ti—Un	Selling Price			
d.	per	Tincturæ—(cont).	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
45	lb.	Tr. quassiæ	—	1 8	0 6	0 1
45	lb.	Tr. quillaiæ	—	1 8	0 6	0 1
264	lb.	Tr. quininæ	—	9 5	2 9	0 5
54	lb.	Tr. quininæ ammoniata	6 9	2 0	0 7	0 1
		Tr. quin. am., pkd. (std. bot.)	—	2 4	1 6	ʒij.
78	lb.	Tr. quin. ammon. c. cinnam.	—	2 9	0 10	0 2
45	lb.	Tr. rhei co.	5 6	1 7	0 6	0 1
92	lb.	Tr. rhei '85	11 0	3 2	0 11	0 2
7	oz.	Tr. rhus toxicod.	—	—	1 1	0 2
51	lb.	Tr. scillæ	—	1 11	0 7	0 1
60	lb.	Tr. senegæ	—	2 2	0 8	0 2
54	lb.	Tr. sennæ co. Alex.	—	2 0	0 7	0 1
45	lb.	Tr. sennæ co. Tinnev.	—	1 7	0 6	0 1
78	lb.	Tr. serpentariæ	—	2 9	0 9	0 2
42	lb.	Tr. stramonii C	—	1 6	0 6	0 1
64	lb.	Tr. stramonii sem. C	—	2 3	0 8	0 2
96	lb.	Tr. strophanthi C	—	3 5	1 0	0 2
7	oz.	Tr. sumbul	—	—	1 1	0 2
84	lb.	Tr. tolutana	—	3 0	0 10	0 2
60	lb.	Tr. valerianæ	—	2 2	0 8	0 2
92	lb	Tr. valerianæ ætherea	—	3 0	0 10	0 2
57	lb.	Tr. valerianæ ammoniata	—	2 1	0 8	0 2
87	lb.	Tr. veratri C	—	3 0	0 10	0 2
7	oz.	Tr. viburni prunifol.	—	—	1 1	0 2
78	lb.	Tr. zingiberis	—	2 7	0 9	0 2
87	lb.	Tr. zingiberis fort. P.B. '85	—	3 0	0 10	0 2
		Tr. zingiberis fort., pkd.	ʒij.	1 9	ʒj.	1 0
79	lb	Toilet vinegar P.L.F.	—	6 9	1 10	0 4
54	lb.	Toncæ fabæ Para frosted	—	2 0	0 7	0 1
98	lb.	Tonca fabæ Angostura	—	7 0	2 1	0 4
36	oz.	Totaquina	—	—	5 3	0 9
90	lb.	Tragacantha	—	3 3	0 10	—
68	lb.	Tragacanthæ pulv. opt.	—	6 10	1 11	0 4
08	lb.	Tragacanthæ pulv. sec.	—	4 0	1 1	0 2
42	oz.	Triferrin	—	—	—	1 0
24	30	Triferrin tablets gr. 5	doz.	1 3	—	—
8	oz.	Trinitrophenol	—	—	1 2	0 2
10	lb.	Trinitrophenol 1% sol.	1 3	0 5	0 2	—
21	lb.	Trinitrophenol alc. sol.	2 6	0 10	0 3	—
21	lb.	Tripoli photographic	2 8	0 9	0 3	—
8	lb.	Tripoli polishing	1 0	0 4	0 1	—
15	dr.	Trypsin	—	—	—	2 3
18	oz.	Tumenol ammon.	—	—	—	0 8
		U				
33	lb.	Ulmi fulvæ cortex	—	1 3	0 4	—
24	lb.	Ulmi fulvæ corticis pulv.	3 0	0 11	0 4	—
30	lb.	Ultramarine	3 9	1 2	0 4	—
58	15	Unden pellets	—	6 6	tube	—
		Unguenta				
36	lb.	Unguentum acidi benzoici co.	4 6	1 4	0 5	—
15	lb.	Ung. acidi borici	1 10	0 7	0 3	—
13	lb.	Ung. acidi borici flavum	1 8	0 7	0 2	—
60	lb.	Ung. acidi carbolici co.	7 6	2 2	0 8	—
21	lb.	Ung. acidi salicylici	2 8	0 10	0 3	—
48	lb.	Ung. ac. tannic	—	1 9	0 6	—
78	oz.	Ung. aconitinæ *B*	—	—	—	1 9
15	oz.	Ung. adrenalini	—	—	2 3	0 4
27	lb.	Ung. althææ	3 6	1 0	0 4	—
33	lb.	Ung. anilin. vir. (1 : 1,000)	—	1 3	0 5	—
48	lb.	Ung. anilin. coccin. 5%	—	1 9	0 6	0 1
84	lb.	Ung. anilin. coccin. 8%	—	3 0	0 10	0 2
63	lb.	Ung. antim. tart. *B*	7 10	2 3	0 8	—

Cost		Un	Selling Price			
d.	per	Unguenta—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
78	lb.	Ung. aquæ rosæ	—	2 10	0 9	—
30	lb.	Ung. aquos	3 9	1 2	0 4	—
18	oz.	Ung. atropinæ *B*	—	—	2 8	0 5
7	oz.	Ung. belladonnæ *B*	—	—	1 1	0 2
48	lb.	Ung. bismuthi oleat. B.P.C	6 0	1 9	0 6	0 1
28	lb.	Ung. boracis	3 6	1 0	0 4	—
11	oz.	Ung. cadmii iodidi	—	—	1 8	0 3
18	lb.	Ung. calamin. N.H.I.	2 3	0 8	0 3	—
17	lb.	Ung. calaminæ	2 3	0 8	0 3	0 1
33	lb.	Ung. camphoræ B.P.C.	4 2	1 3	0 5	—
57	lb.	Ung. cantharidini C	—	2 0	0 7	—
57	lb.	Ung. cantharidis C	—	2 1	0 7	0 1
24	lb.	Ung. capsici	3 0	0 11	0 4	0 1
8	oz.	Ung. capsici Co.	—	—	1 2	0 2
28	lb.	Ung. cetacei	3 6	1 0	0 4	—
38	lb.	Ung. chaulmoogræ	—	1 5	0 6	—
20	lb.	Ung. chrom. (factory)	2 6	0 9	0 3	—
26	lb.	Ung. chrysarobini	3 3	1 0	0 4	0 1
39	oz.	Ung. cocainæ *B, F*	—	—	5 9	0 10
42	lb.	Ung. conii C	—	1 6	0 6	0 1
54	lb.	Ung. creosoti	—	2 0	0 7	—
42	lb.	Ung. cupri oleatis	5 3	1 6	0 6	—
72	lb.	Ung. elemi	—	2 7	0 9	0 2
22	lb.	Ung. eucalypti	2 9	0 10	0 3	—
16	lb.	Ung. flav. dil. 1-4	—	0 7	0 2	—
28	lb.	Ung. gallæ	—	1 0	0 4	—
60	lb.	Ung. gallæ c. opio *B*, ex *F*	—	2 2	0 7	0 1
48	lb.	Ung. glycer. et ichthamol "jelly"	6 0	1 9	0 6	—
41	lb.	Ung. glycer. et zinc. " jelly "	5 2	1 6	0 5	—
26	lb.	Ung. glycerini plumbi subacet.'98	—	1 0	0 4	—
69	lb.	Ung. hæmamol (D.F.)	—	2 2	0 7	0 1
27	lb.	Ung. hamamelidis	3 6	1 0	0 4	—
42	lb.	Ung. hydrargyri	5 3	1 6	0 6	—
24	lb.	Ung. hyd. ammoniati C	3 0	0 11	0 4	—
22	lb.	Ung. hyd. ammoniati dilutum C	2 9	0 10	0 3	—
38	lb.	Ung. hyd. co.	4 9	1 5	0 5	—
51	lb.	Ung. hyd. iodidi rubri C	6 5	1 10	0 7	—
39	lb.	Ung. hyd. nitratis	—	1 5	0 5	—
20	lb.	Ung. hyd. nitratis dil.	2 6	0 9	0 3	—
32	lb.	Ung. hyd. oleatis	4 0	1 2	0 4	—
18	lb.	Ung. hyd. oxidi flavi C	2 3	0 8	0 3	—
33	lb.	Ung. hyd. oxidi rubri C	4 2	1 3	0 5	—
48	lb.	Ung. hyd. subchloridi	—	1 9	0 6	0 1
20	lb.	Ung. ichthamol	—	0 9	0 3	—
48	lb.	Ung. ichthamol. co. B.P.C.	—	1 9	0 6	0 1
33	lb.	Ung. iodi	—	1 3	0 5	0 1
24	lb.	Ung. iodi denigrescens	—	1 0	0 4	—
24	lb.	Ung. iodi denigresc. N.H.I.	—	1 0	0 4	—
51	lb.	Ung. iodoformi	—	2 0	0 7	0 1
30	lb.	Ung. lanæ co.	3 9	1 1	0 4	0 1
48	lb.	Ung. menthol 5%	—	1 9	0 6	0 1
27	lb.	Ung. mercuriale (" Trooper ")	3 6	1 0	0 4	—
24	lb.	Ung. metallorum B.P.C.	3 0	0 11	0 4	—
36	lb.	Ung. methyl salicyl. fort.	—	1 4	0 5	0 1
21	lb.	Ung. methyl salicyl. dil.	—	0 10	0 3	—
60	lb.	Ung. methyl salicyl. co. fort.	—	2 2	0 7	0 1
32	lb.	Ung. methyl salicyl. co. dil.	—	1 2	0 4	0 1
8	oz.	Ung. oleoresinæ capsici	—	—	1 2	0 2
9	oz.	Ung. oleoresinæ capsici co.	—	—	1 4	0 3
15	oz.	Ung. opii *B, F*	—	—	2 3	0 4
19	lb.	Ung. paraf. alb.	2 4	0 9	0 3	—
16	lb.	Ung. paraf. flav.	2 0	0 8	0 3	—
19	lb.	Ung. phenol.	—	0 9	0 3	—
21	lb.	Ung. picis carb.	2 8	0 10	0 3	—
30	lb.	Ung. picis carb. co.	3 9	1 0	0 5	—
22	lb.	Ung. picis liq.	2 9	0 10	0 3	—
42	lb.	Ung. pini sedat. (D.F.)	—	1 6	0 5	0 1
26	lb.	Ung. plumbi acetatis	3 3	0 11	0 4	—

Cost		Un—Ve	Selling Price			
d.	per	Unguenta—(cont.)	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
38	lb.	Ung. plumbi carb.	—	1 6	0 5	—
60	lb.	Ung. plumbi iodidi	—	2 2	0 8	0 2
42	lb.	Ung. plumbi oleatis	5 3	1 7	0 6	0 1
24	lb.	Ung. plumbi subacetatis	3 0	0 11	0 3	—
42	lb.	Ung. potass. polysulph.	—	1 6	0 6	—
36	lb.	Ung. potassæ sulphuratæ	4 6	1 4	0 5	—
66	lb.	Ung. potassii iodidi	—	2 5	0 9	0 2
20	lb.	Ung. resinæ	2 6	0 9	0 3	—
33	lb.	Ung. resinæ co. B.P.C.	—	1 3	0 4	—
38	lb.	Ung. resorcini B.P.C.	—	1 5	0 5	0 1
30	lb.	Ung. resorcini co. B.P.C.	—	1 1	0 4	0 1
60	lb.	Ung. resorcini et bismuthi co. B.P.C.	—	2 2	0 8	0 2
72	lb.	Ung. rosæ album B.P.C.	—	2 7	0 9	—
24	lb.	Ung. rusci co.	—	0 11	0 4	—
51	lb.	Ung. sabinæ *B*	—	2 0	0 7	0 1
42	lb.	Ung. sambuci flor.	5 3	1 6	0 5	0 1
30	lb.	Ung. sambuci viride	3 9	1 1	0 4	0 1
17	lb.	Ung. simplex alb.	2 1	0 8	0 3	—
14	lb.	Ung. simpl. flav.	—	0 7	0 2	—
54	lb.	Ung. staphisagriæ *C*	—	2 0	0 7	0 1
13	lb.	Ung. sulphuris	1 8	0 6	0 2	—
24	lb.	Ung. sulphuris co.	3 0	0 11	0 4	—
28	lb.	Ung. sulphuris et resorcini	—	1 2	0 4	—
90	lb.	Ung. sulphuris hypochloritis	—	3 3	1 0	0 2
60	lb.	Ung. sulphuris iodidi	—	2 2	0 8	0 2
36	lb.	Ung. terebinthinæ	4 6	1 4	0 5	—
90	lb.	Ung. thymol 5%	—	3 3	0 11	0 2
93	lb.	Ung. thymol co. B.P.C.	—	3 4	1 0	—
51	lb.	Ung. thymol comp. dilut. B.P.C.	—	2 0	0 7	—
10	oz.	Ung. veratrinæ *C*	—	—	1 6	0 3
16	lb.	Ung. zinci oxid.	2 0	0 7	0 2	—
22	lb.	Ung. zinci c. ol. ricini	2 9	0 10	0 3	—
20	lb.	Ung. zinci c. ac. borici	2 6	0 9	0 3	—
36	lb.	Ung. zinci oleatis	4 6	1 4	0 5	0 1
45	lb.	Ung. zinci stearat. B.P.C.	—	1 9	0 6	—
20	lb.	University cream P.L.F.	2 6	0 9	—	—
102	oz.	Uradal B.P.C.	—	—	14 10	2 2
26	oz.	Uranii acetas	—	—	3 9	0 7
20	oz.	Uranii nitras	—	—	3 0	0 5
24	lb.	Urea	—	0 11	0 4	0 1
24	oz.	Ureæ hydrochlor.	—	—	3 6	0 6
13	oz.	Urethanum *B*	—	—	2 3	0 4
36	oz.	Urotropin	—	—	5 3	0 11
12	lb.	Uvæ ursi folia	—	0 6	0 2	—
		V				
78	lb.	Valerianæ rhizoma Ang.	—	2 10	0 10	0 2
22	lb.	Valerianæ rhizoma Belg.	—	0 10	0 4	—
103	oz.	Validol	—	—	—	3 6
103	100	Validol perles	doz.	1 6	—	—
27	25	Valyl perles gr. 2	doz.	1 6	—	—
22	oz.	Vanillæ fabæ	—	—	3 3	0 6
26	oz.	Vanillinum	—	—	3 9	0 7
189	12 v.	Ventriculin, P., D. & Co.	12	vials	21 0	—
122	100 gr	Ventriculin with iron, P., D.&Co.	100	grs.	12 6	—
98	oz.	Veramon *C*	—	—	—	2 3
126	100	Veramon tablets gr. 6 *C*	doz.	2 0	—	—
19	lb.	Veratri alb. rhiz. pulv.	—	0 9	0 3	—
60	lb.	Veratri virid. rhiz. pulv.	—	2 3	0 8	0 2
20	dr.	Veratrina *B*	—	—	—	3 0
36	oz.	Veronal *B*	—	—	—	0 9
22	25	Veronal tablets, gr. 5 *B*	doz.	1 6	—	—
36	oz.	Veronal, sodium *B*	—	—	—	0 9
22	25	Veronal sodium tabs. *B*	doz.	1 6	—	—

Cost		Vi—Zi	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
		Vina				
42	lb.	Vinum aloes	—	1 6	0 6	—
24	lb.	Vin. antimoniale *C*	—	0 11	0 4	—
126	gal.	Vin. aurantii	pint	2 0	—	—
198	gal.	Vin. aurantii detan.	pint	3 3	0 4	—
54	lb.	Vin. cinchonæ	—	2 0	0 7	0 1
66	lb.	Vin. cocæ *B, F*	—	2 5	0 9	0 2
27	lb.	Vin. colchici *C*	—	1 0	0 4	0 1
36	lb.	Vin. colchici sem. *C*	—	1 4	0 5	0 1
30	lb.	Vin. ferri	3 9	1 1	0 4	—
24	lb.	Vin. ferri citratis	3 0	1 0	0 4	—
38	lb.	Vin. ipecacuanhæ '14 *C*	—	1 5	0 5	—
84	lb.	Vin. opii *B, F*	—	3 0	0 10	0 2
51	lb.	Vin. pepsini	6 4	1 10	0 7	—
18	lb.	Vin. quininæ	2 3	0 8	0 3	—
66	lb.	Vin. rhei	—	2 4	0 8	—
		W				
4.5	lb.	Waterglass, pkd.	2 lb.	0 10	4 lb.	1 4
8	lb.	Water softener P.L.F.	1 4	—	—	—
31	lb.	White oils P.L.F.	4 0	1 1	0 4	—
		X				
57	oz.	Xeroform	—	—	—	1 5
24	lb.	Xylol rectif.	—	1 0	0 4	—
		Y				
4	oz.	Yeast (dried)	—	—	0 7	0 1
5	gr.	Yohimbinæ hydrochlor. *B*	per	gr.	0 10	—
11	10	Yohimbine tablets *C*	per	tube	1 6	—
		Z				
26	lb.	Zinci acetas	—	1 0	0 4	0 1
15	oz.	Zinci benzoas ver.	—	—	2 3	0 4
11	oz.	Zinci bromidum	—	—	1 8	0 3
24	lb.	Zinci carbonas	—	1 0	0 4	0 1
32	lb.	Zinci chloridum (fused) *C*	4 0	1 2	0 4	0 1
11	oz.	Zinci chloridum (sticks) *C*	—	—	1 8	0 3
14	lb.	Zinci chloridum coml. *C*	1 9	0 7	0 2	—
33	oz.	Zinci et hydrarg. cyan. *B*	—	—	4 10	0 9
24	oz.	Zinci iodidum	—	—	3 6	0 6
12	oz.	Zinci lactas	—	—	1 9	0 3
48	lb.	Zinci oleas præcip.	—	1 9	0 6	0 1
51	lb.	Zinci oleostearas	—	1 10	0 7	0 1
16	lb.	Zinci oxidum	2 0	0 7	0 2	—
66	lb.	Zinci oxidum (Howards)	—	2 5	0 9	—
19	lb.	Zinci oxidum (Hubbuck)	2 5	0 9	0 3	—
12	lb.	Zinci oxid. c. amylo	1 6	0 6	0 2	—
12	lb.	Zinci oxid. c. amylo et ac. bor.	1 6	0 6	0 2	—
14	oz.	Zinci permanganas	—	—	2 3	0 4
15	oz.	Zinci peroxidum 20%	—	—	2 3	0 5
42	lb.	Zinci phosphas	—	1 6	0 5	0 1
15	oz.	Zinci phosphidum	—	—	2 3	0 4
45	lb.	Zinci stearas	—	1 8	0 7	0 1
12	oz.	Zinci sulphanilas	—	—	1 9	0 3
9	lb.	Zinci sulphas	1 2	0 5	0 2	—
6	lb.	Zinci sulphas coml.	0 9	0 3	0 1	—
8	oz.	Zinci sulphidum pur.	—	—	1 1	0 2
36	lb.	Zinci sulpho carb. pulv.	—	1 4	0 5	0 1
16	oz.	Zinci tannas	—	—	2 4	0 4
16	oz.	Zinci valerianas pulv.	—	—	2 4	0 4
38	lb.	Zincum granulatum pur.	—	1 4	0 5	—
13	lb.	Zincum granulatum coml.	1 8	0 7	0 2	—
13	lb.	Zingiberis rhizoma Afric.	1 8	0 6	0 2	—
15	lb.	Zingib. rhiz. Afric. pulv.	1 0	0 6	0 2	—
14	lb.	Zingib. rhiz. Afric. pulv. crs.	1 9	0 6	0 2	—
42	lb.	Zingib. rhiz. Jam. opt.	5 3	1 6	0 6	—
36	lb.	Zingib. rhiz. Jam. pulv. opt.	4 6	1 4	0 5	0 1
32	oz.	Zircon nit.	—	—	4 8	0 8

Ampullæ	Cost per ½ doz. d.	Sell per ½ doz. s.	d.	Cost per doz. d.	Sell per doz. s.	d.
cetyl choline 0.05	40	5	0	—	—	
cetyl choline 0.1	48	6	0	—	—	
drenalin	18	2	3	34	4	3
pomorphinæ hydroch. gr. $\frac{1}{20}$ .. C	18	2	3	34	4	3
tropinæ sulph. gr. $\frac{1}{100}$ .. .. B	18	2	3	34	4	3
enzamin. hyd. gr. $\frac{1}{6}$, adrenalin. gr. $\frac{1}{1000}$ ..	18	2	3	34	4	3
ismuth. 0.2 gm.	30	3	9	52	6	6
ismuth. salicyl. 1.2 c.c.	26	3	3	46	5	9
affein. sod.-sal. gr. 3..	18	2	3	34	4	3
affein. sodii benz. 3.75	18	2	3	34	4	3
amph. in ol. olivæ gr. $1\frac{1}{2}$, gr. 3	18	2	3	34	4	3
amphor, æther, ol. oliv.	26	3	3	48	6	0
holine hyd. 0.1 c.c.	46	5	9	—	—	
ocain. hydroch. gr. $\frac{1}{6}$, gr. $\frac{1}{3}$, gr. $\frac{1}{2}$ .. B, F	18	2	3	34	4	3
ocain. hydroch. gr. $\frac{1}{3}$ .. .. .. adrenalin. gr. $\frac{1}{1000}$ .. .. .. B, F	18	2	3	34	4	3
ocain. hydroch. gr. $\frac{1}{8}$ .. .. .. adrenalin. gr. $\frac{1}{600}$ .. .. .. B, F	18	2	3	34	4	3
igitalin. gr. $\frac{1}{10}$ C	22	2	9	30	5	0
metinæ hydroch. gr. $\frac{1}{2}$ C	30	3	9	52	6	6
metin. hydroch. gr. 1 C	42	5	3	78	9	6
phedrine sulph. gr. $\frac{3}{4}$	22	2	9	40	5	0
rgotoxin. ethanesulph. 0.5 mg.	30	3	9	52	6	6
rgotoxin. phosphate 0.5 mg.	30	3	9	52	6	6
thyl chaulmoogratis 2 c.c.	27	3	9	56	7	0
thyl morrhuatis	24	3	0	23	5	8
thyl hydnocarpate with creosote, camph., olive oil E.C.C.O.	22	2	9	40	5	0
xtract. ergotæ gr. $1\frac{1}{2}$ .. .. B	18	2	3	34	4	3
xtract. ergotæ gr. $3\frac{1}{2}$ .. .. B	26	3	3	48	6	0
xtract. ergotæ gr. 7 .. .. .. B	40	5	3	78	9	6
xt. pituitary liq. 0.5	30	3	9	56	7	0
xt. pituitary liq. 1.0	48	6	0	88	11	0
erri et ammon. cit. vir. gr. $\frac{1}{2}$	18	2	3	34	4	3
lucosi 2 fl. oz. for 1 pt.	16	2	0	—	—	
um saline conc. 50 c.c.	20	2	6	each	—	
lyoscin. hydrobr. gr. $\frac{1}{100}$ C	18	2	0	34	4	3
ndigo carmine 0.4 per cent.	32	4	0	60	7	6
odi, boxes of 6	10	1	6	—	—	
langanese butyrate 1.5 c.c.	32	4	0	60	7	6
lercurial cream ♏10	20	2	6	36	4	6
lorph. hydroch. gr. $\frac{1}{8}$, gr. $\frac{1}{4}$, gr. $\frac{1}{3}$, gr. $\frac{1}{2}$ B, F	20	2	6	38	4	9
lorph. hydroch. gr. $\frac{1}{4}$ .. .. .. atropin. sulph. gr. $\frac{1}{200}$ .. .. B, F	20	2	6	38	4	9
l. cinerei (grey oil) $\frac{1}{2}$ c.c.	18	2	3	34	4	3
eptoni $7\frac{1}{2}$% 1.5 c.c.	30	3	9	56	7	0
ilocarpin. nit. gr. $\frac{1}{4}$ C	22	2	9	40	5	0
ituitrin $\frac{1}{2}$ c.c...	—	4	6	—	8	0
ituitrin 1 c.c...	—	7	6	—	14	0
uinine urethane 2 c.c.	22	2	9	40	5	0
copolamin. hydrobr. gr. $\frac{1}{100}$ .. .. morph. acet. gr. $\frac{1}{4}$ .. .. .. B, F	18	2	3	34	4	3
dii cacodyl. gr. $\frac{1}{2}$, gr. $\frac{5}{6}$ .. .. B	18	2	3	34	4	3
dii cacodyl. gr. $\frac{1}{3}$, ferri cacodyl. gr. $\frac{1}{3}$ B	22	2	9	40	5	0
trophanthin. gr. $\frac{1}{500}$ C	18	2	3	34	4	3
trychnin. sulph. gr. $\frac{1}{60}$, gr. $\frac{1}{30}$ .. B	18	2	3	34	4	3
ymmetrical ureas S.U.M. 36 (0.01 gm.) ..	30	4	6	64	8	0
ymmetrical ureas S.U.P. 36 (0.01 gm.) ..	30	4	6	64	8	0
ymmetrical ureas S.U.P. 468 (0.001 gm.) ..	60	7	6	—	—	
etraiodophthalein T.I.P. 3.5 gm. 28 c.c. ..	22	2	9	each	—	
hiosinamin.-sod. sal. 2.3 c.c.	42	5	3	76	9	6

Cost		Capsulæ vel Perles	Selling Price					
d.	per			s.	d.		s.	d.
270	1,000	Caps. apiol. ♏ 3	36	2	0	24	1	4
381	1,000	Caps. apiol. ♏ 5	36	2	6	24	1	9
468	1,000	Caps. apiol (3) et ext.ergot.(2) C	36	3	0	24	2	0
326	1,000	Caps. apiol steel pulegii ♏ 5 ..	36	2	1	24	1	6
180	1,000	Caps. benzyl benz. ♏ 3 ..	36	1	6	24	1	1
141	1,000	Caps. Blaudii gr. 10	36	1	3	24	1	0
174	1,000	Caps. Blaudii gr. 15	36	1	5	24	1	1
129	1,000	Caps. Blaudii pil. gr. 5 ..	36	1	1	24	0	11
153	1,000	Caps. Blaudii pil. (5) et hæmoglob. (3)	36	1	3	24	1	0
153	1,000	Caps. Blaudii pil. (5) et ac. arsenios ($\frac{1}{50}$) C	36	1	3	24	1	0
153	1,000	Caps. Blaudii pil. (5) et ac. arsenios. et strych. .. B	36	1	3	24	1	0
186	1,000	Caps. Blaudii pil. (10) et ext. casc. sag. (1)	36	1	6	24	1	1
276	1,000	Caps. carbon tetrachlor. 1 c.c.	36	2	0	24	1	6
402	1,000	Caps. carbon tetrachlor. 2 c.c...	36	2	9	24	1	11
192	1,000	Caps. casc. sag. ext. liq. ♏ 20..	36	1	6	24	1	1
222	1,000	Caps. casc. sag. ext. liq. ♏ 30..	36	1	8	24	1	2
357	1,000	Caps. casc. sag. ext. liq. ♏ 60..	36	2	5	24	1	8
252	1,000	Caps. cinnam. et quin.	36	1	10	24	1	3
252	1,000	Caps. colchicin. salicyl. gr. $\frac{1}{250}$ C	36	2	1	24	1	6
390	1,000	Caps. colchicin. salicyl. gr. $\frac{1}{50}$ C	36	3	0	24	2	0
132	1,000	Caps. copaibæ (Maran.) ♏ 5 ..	36	1	2	24	0	11
222	1,000	Caps. copaibæ (Maran.) ♏ 10..	36	1	9	24	1	2
303	1,000	Caps. copaibæ (Maran.) ♏ 15..	36	2	1	24	1	6
372	1,000	Caps. copaibæ et cubebæ et buchu ♏ 10	36	2	6	24	1	9
396	1,000	Caps. copaibæ et cubebæ et ol. santali ♏ 10	36	2	8	24	1	9
129	1,000	Caps. creosoti in oleo ♏ 1 C	36	1	2	24	0	11
141	1,000	Caps. creosoti in oleo ♏ 2 C	36	1	3	24	0	11
174	1,000	Caps. creosoti in oleo ♏ 3 C	36	1	6	24	1	1
384	1,000	Caps. ergotæ ext. gr. 3 .. B	36	2	6	24	1	9
207	1,000	Caps. filicis maris ♏ 5	36	1	8	24	1	2
306	1,000	Caps. filicis maris ♏ 10 ..	36	2	3	24	1	6
414	1,000	Caps. filicis maris ♏ 15 ..	36	3	2	24	1	9
483	1,000	Caps. filicis maris ♏ 20 ..	36	3	1	24	2	3
666	1,000	Caps. filicis maris ♏ 30 ..	36	4	1	24	2	10
156	1,000	Caps. guaiacol. in oleo ♏ 1 ..	36	1	3	24	1	0
204	1,000	Caps. guaiacol. in oleo ♏ 2 ..	36	1	8	24	1	2
309	1,000	Caps. guaiacol. in oleo ♏ 5 ..	36	2	1	24	1	6
168	1,000	Caps. hæmoglobin. gr. 3 ..	36	1	4	24	1	0
192	1,000	Caps. hæmoglobin. gr. 5 ..	36	1	7	24	1	2
336	1,000	Caps. lecithin. gr. $2\frac{1}{2}$	36	2	4	24	1	7
450	1,000	Caps. lecithin. ($1\frac{1}{2}$) et. paraf. liq. (30)	36	2	11	24	2	0
486	500	Caps. menthol valer. ♏ 5 ..	36	5	7	24	3	8
132	1,000	Caps. ol. cajuputi ♏ 1	36	1	2	24	0	11
162	1,000	Caps. ol. caryophylli ♏ 2 ..	36	1	4	24	1	1
174	1,000	Caps. ol chaulmoogra ♏ 5 ..	36	1	6	24	1	1
246	1,000	Caps. ol. chaulmoogra ♏ 10 ..	36	1	6	24	1	1
540	1,000	Caps. ol. chenopodii ♏ 5 ..	36	3	4	24	2	4
228	1,000	Caps. ol. cinnamomi ♏ 1 ..	36	1	8	24	1	3
348	1,000	Caps. ol. cinnamomi ♏ 2 ..	36	2	4	24	1	8
270	1,000	Caps. ol. methylene Blue gr. 2..	36	2	0	24	1	6
162	1,000	Caps. ol. morrhuæ ♏ 10 ..	36	1	4	24	1	1
258	1,000	Caps. ol. morrhuæ ♏ 15 ..	36	2	0	24	1	5
274	1,000	Caps. ol. morrhuæ ♏ 20 ..	36	2	4	24	1	8
321	1,000	Caps. ol. morrhuæ ♏ 30 ..	36	2	4	24	1	8
276	1,000	Caps. ol. morrhuæ (20) et creosot. (1) C	36	2	0	24	1	4
360	1,000	Caps. ol. morrh. (30) et creos. (2)C	36	2	4	24	1	8
246	1,000	Caps. ol. olivæ ♏ 15	36	1	9	24	1	3
348	1,000	Caps. ol. olivæ ♏ 30	36	2	4	24	1	8
222	1,000	Caps. ol. ricini ♏ 15	36	1	7	24	1	2
300	1,000	Caps. ol. ricini ♏ 30	36	1	10	24	1	5

Cost d.	Cost per	Capsulæ vel Perles (cont.)	Selling Price	s. d.		s. d.
396	1,000	Caps. ol. ricini ♏ 60	36	2 8	24	1 10
264	500	Caps. ol. santali ♏ 5	36	3 3	24	2 3
345	500	Caps. ol. santali ♏ 7½	36	4 1	24	2 10
492	500	Caps. ol. santali ♏ 10	36	5 9	24	3 9
456	1,000	Caps. ol. santali (5) c. copaiba (5)	36	2 11	24	2 0
129	1,000	Caps. ol. terebinthinæ rect. ♏ 5	36	1 2	24	0 11
168	1,000	Caps. ol. terebinthinæ rect. ♏ 10	36	1 5	24	1 1
150	1,000	Caps. perichthol. ♏ 3	36	1 3	24	1 0
180	1,000	Caps. perichthol. ♏ 5	36	1 6	24	1 1
143	1,000	Caps. picis ♏ 5	36	1 6	24	0 11
228	1,000	Caps. syrup Eastoni ♏ 30 *B*	36	1 9	24	1 2
321	1,000	Caps. syrup Eastoni ʒj. *B*	36	2 3	24	1 6
228	1,000	Caps. syrup. glyceroph. co. ♏ 30 *C*	36	1 9	24	1 2
324	1,000	Caps. syrup. glyceroph. co. ʒj. *C*	36	2 3	24	1 7
228	1,000	Caps. syrup. hypophosphitum co. ♏ 30 .. .. *C*	36	1 9	24	1 2
324	1,000	Caps. syrup. hypophosphitum co. ʒj. .. .. *C*	36	2 3	24	1 7
147	1,000	Caps. terebeni	36	1 6	24	1 4
222	1,000	Caps. tinct. quininæ am. ♏ 30	36	1 9	24	1 2
321	1,000	Caps. tinct. quininæ am. ʒj. ..	36	2 3	24	1 8

Cost d.	Cost per	Tabellæ	Selling Price (in containers) 100 s. d.	50 s. d.	25 s. d.
63	1,000	Acidi arseniosi gr. $\frac{1}{100}$ .. .. *B*	1 6	1 1	0 9
63	1,000	Acidi arseniosi gr. $\frac{1}{50}$ .. .. *B*	1 6	1 1	0 9
51	1,000	Acetanilidi gr. 3	1 3	0 10	0 7
63	1,000	Acetanilidi gr. 5	1 5	1 1	0 9
63	1,000	Acetanilidi co.	1 5	0 11	0 7
72	1,000	Acetanilidi (3) caffein. (½) ammon. carb. (1)	1 6	1 1	0 9
78	1,000	Acetanilidi (3) caffein. (½) sod. bic. (1)	1 6	1 1	0 9
75	1,000	Aloes et ferri gr. 4	1 9	1 1	0 9
87	1,000	Aloes et myrrhæ	1 11	1 2	0 9
75	1,000	Aloini gr. ¼	1 9	1 1	0 9
75	1,000	Aloini gr. ½	1 9	1 1	0 9
69	1 000	Aloini co. .. .. .. *B*	1 9	1 1	0 9
246	1,000	Amidopyrinæ gr. 5	4 1	2 3	1 3
63	1,000	Ammonii bromidi gr. 5	1 5	1 0	0 7
63	1,000	Antacid (Roberts)	1 6	1 1	0 9
48	1,000	Aspirin gr. 5	1 2	0 11	0 7
105	1,000	Aspirin gr. 10	2 0	1 4	0 11
108	1,000	Aspirin (4) et caffein. (1)	2 0	1 3	0 10
108	1,000	Aspirin (2½) et phenac. (2½)	2 0	1 2	0 10
120	1,000	Aspirin (2½) et phenac. (2½) et caffein.(1)	2 4	1 6	0 11
162	1.000	Aspirin (5) phenacet. (2½) ipecac. co. (2½) .. .. *B, F*	2 9	1 7	1 0
108	1,000	Aspirin (3) et pulv. ipec. co. (2) *B, F*	2 0	1 3	0 9
171	1,000	Aspirin (4) et quininæ sulphatis (1) ..	3 0	1 9	1 1
222	1,000	Barbitoni gr. 5 .. .. .. *B*	3 8	2 0	1 2
246	1,000	Barbitoni solubile gr. 5	4 1	2 4	1 4
186	1,000	Benzonaphthol gr. 5	3 3	1 10	1 2
87	1,000	Beta-naphthol gr. 3	1 11	1 2	0 9
111	1,000	Beta-naphthol. gr. 5	2 3	1 4	0 11
87	1,000	Beta-naphthol co.	1 11	1 2	0 9
69	1,000	Bismuthated magnesia	—	1 1	—
162	1,000	Bismuthi carbonatis gr. 5	2 0	1 8	1 1
99	1,000	Bismuthi carb. (2½) et sod. bic. (2½) ..	2 0	1 2	0 9
99	1,000	Bism. carb. (2) sod. bic. (2) p. zingib. (1)	2 0	1 2	0 9
99	1,000	Bismuthi carb. (2) sod. bic. (1½) p. zingib. (½) p. rhei (1)	2 0	1 2	0 9
111	1,000	Bismuthi carb. (2) pepsin. (1) carb. lig. (2)	2 3	1 4	0 10
150	1 000	Bismuthi salicylatis gr. 5	2 10	1 7	1 0
135	1,000	Bismuthi subnitratis gr. 5	2 6	1 6	0 11
51	1,000	Blaud pil. gr. 5	1 4	0 11	0 8
51	1,000	Blaud pil. (5) et ac. arsenios. ($\frac{1}{100}$) *C*	1 6	1 1	0 9
63	1,000	Blaud pil. (5) ac. arsenios. ($\frac{1}{100}$) strychninæ ($\frac{1}{100}$) .. .. .. *B*	1 6	1 1	0 9
51	1,000	Blaud pil. (5) aloin. ($\frac{1}{20}$)	1 6	1 1	0 9
51	1,000	Blaud pil. (5) et casc. sag. (½)	1 4	0 11	0 8
84	1,000	Blaud pil.mang.diox.(1) ac.arsen.($\frac{1}{64}$) *C*	1 7	1 1	0 9
99	1,000	Caffeinæ citratis gr. 2	2 0	1 3	0 11
102	500	Calcii acetylsalicylatis	3 6	2 0	1 2
45	1,000	Calcii lactatis gr. 5	1 2	0 10	0 7
51	1,000	Calcii sulphid. ad gr. 1	1 3	0 11	0 7
38	1,000	Carbonis lig. (salicis) gr. 5	1 2	0 10	0 7
39	1,000	Cascaræ sag. ext. gr. 2	1 2	0 9	0 6
75	1,000	Cascaræ sag. ext. gr. 3	1 8	1 1	0 7
111	1,000	Cascaræ sag. ext. gr. 5	2 3	1 4	0 11
39	1,000	Cerevisiæ ferm. gr. 2	1 0	0 10	0 6
51	1.000	Cerevisiæ ferm. gr. 5	1 2	0 11	0 7
273	1,000	Cinchophenum gr. 5	4 5	2 4	1 4
120	1,000	Cinnam. et quin.	2 3	1 8	1 1
264	1,000	Codeinæ gr. ¼ .. .. .. *B*	4 5	2 5	1 4
222	500	Codeinæ gr. ½ .. .. .. *B*	7 0	3 9	2 0
200	250	Codeinæ gr. 1 .. .. .. *B*	12 3	6 4	3 4
210	1,000	Codeinæ phosphatis gr. ¼ .. *B*	3 7	2 0	1 2
173	500	Codeinæ phosphatis gr. ½ .. *B*	5 7	3 1	1 9
151	250	Codeinæ phosphatis gr. 1 .. *B*	9 4	5 0	2 8
225	500	Cotarnin. hydrochl. gr. ¾ .. *B*	—	4 0	2 6
225	500	Cotarnin. pthal. gr. ¾ .. .. *B*	—	4 0	2 6
69	1,000	Cretæ arom. pulv. gr. 5	1 8	1 1	0 9
75	1,000	Cretæ arom. c.op. gr. 5 *B, ex F*	1 9	1 1	0 9
216	1,000	Diamorph. hyd. gr. $\frac{1}{12}$ .. .. *B, F*	3 8	2 0	1 2
162	1,000	Diamorph. hyd. gr. $\frac{1}{24}$ .. .. *B, F*	2 11	1 9	1 1
180	1,000	Digitalin. amorph. $\frac{1}{100}$ .. .. *B*	3 3	2 0	1 2
126	1,000	Digitalis fol. gr. 1	2 8	—	—
96	1,000	Doveri pulv. gr. 5 .. *B, ex F*	2 0	1 2	0 9
60	25	Emetin. bism. iod. gr. 1 .. *C*	—	—	6 9
87	1,000	Ephedrinæ hydrochloridi gr. ¼ ..	2 9	—	1 0
138	1,000	Ephedrinæ hydrochloridi gr. ½ ..	4 9	—	1 6
186	1,000	Ergotæ ext. gr. 1 .. .. *B*	3 3	1 10	1 1
285	1,000	Ergotæ ext. gr. 2 .. .. *B*	4 8	2 8	1 6
384	1,000	Ergotæ ext. gr. 3 .. .. *B*	6 2	3 4	1 10
270	1,000	Ferri alginatis gr. 5	3 6	1 11	1 2
69	1,000	Ferri redact. gr. 3	1 9	1 1	0 9
72	1,000	Ferri carb. sacch. gr. 5	1 6	1 0	0 8
57	1,000	Formaldeh. B.P.C. gr. 15	—	1 1	—
57	1,000	Formald. et cinnam. gr. 12	—	1 1	—
96	1,000	Fuci ext. gr. 4	1 11	1 2	0 9
108	1,000	Fuci ext. gr. 5	2 0	1 3	0 9
126	1,000	Galvani pil. co. gr. 4	2 8	1 9	1 1
75	1,000	Glycyrrh. pulv. co. gr. 30	—	(40) 10	—
96	1,000	Guaiaci resinæ gr. 5	1 11	1 2	0 9
75	1,000	Guaiaci resinæ (3) sulph. (3)	1 8	1 1	0 9
194	1,000	Guaiacol. carbonatis gr. 5	3 1	1 9	1 1
90	1,000	Hæmoglobin. co.	1 11	1 2	0 9
57	1,000	Hexaminæ gr. 5	1 4	0 11	0 8
33	1,000	Hydrargyri c. creta gr. ½	1 0	0 9	0 7
33	1,000	Hydrargyri c. creta gr. 1	1 0	0 9	0 7
48	1,000	Hydrargyri c. creta gr. 2	1 2	0 10	0 8
126	1,000	Hydrargyri c. creta (1) et p. ipec. co.(1) *B*	2 0	1 2	0 11
36	1,000	Hydrargyri c. creta (½) sod. bic. (½) ..	1 1	0 9	0 7
45	1,000	Hydrargyri c. creta (1) sod. bic. (3) ..	1 3	0 10	0 7
60	1,000	Hydrargyri iodidi rub. gr. $\frac{1}{16}$	1 6	1 1	0 9
60	1,000	Hydrargyri iodidi rub. gr. $\frac{1}{30}$ .. *C*	1 6	1 1	0 9
60	1,000	Hydrargyri iodidi vir. gr. ⅛ .. *C*	1 6	1 1	0 9
60	1,000	Hydrargyri iodidi vir. gr. ¼ .. *C*	1 6	1 1	0 9
39	1 000	Hydrargyri subchloridi gr. ½	1 1	0 10	0 7
51	1,000	Hydrargyri subchloridi gr. 1	1 2	0 10	0 7
93	1,000	Hydrargyri subchloridi gr. 3	1 5	1 0	0 8

Tabellæ
(cont.)

Cost d.	per	Tabellæ (cont.)		Selling Price (in containers) 100 s. d.	50 s. d.	25 s. d.
38	1,000	Hydrargyri subchloridi gr. 5		2 6	1 6	1 0
80	1,000	Hyoscinæ hydrobr. gr. $\frac{1}{100}$	B	3 3	1 9	1 1
44	1,000	Hyoscinæ hydrobr. gr. $\frac{1}{200}$	B	2 8	1 7	0 11
57	1,000	Iodised throat		—	1 1	—
00	1 000	Lactic. bacilli		4 10	2 10	1 8
47	1,000	Lithii carbonatis gr. 5		2 10	1 8	1 1
47	1,000	Lithii citratis gr. 5		2 10	1 8	1 1
52	1,000	Lithii citratis eff. gr. 5 in gr. 15		4 1	2 10	1 4
73	500	Methylsulphonal gr. 5	C	5 7	3 1	1 9
63	1,000	Nitroglycerini gr. $\frac{1}{100}$, $\frac{1}{130}$, $\frac{1}{200}$		1 6	1 1	0 9
40	1,000	Ox bile (purif.) gr. 5		4 1	2 3	1 3
32	1,000	Pepsini gr. 2½ (coated)		2 6	1 6	0 11
02	1,000	Phenacetini gr. 5		2 0	1 2	0 10
59	1,000	Phenacetini, quin., caffein.		2 10	1 8	1 1
11	1,000	Phenacetini (4) et caff. cit. (1)		2 3	1 4	0 11
80	1,000	Phenazoni gr. 5		3 1	1 9	1 1
56	1,000	Phenazoni (4) et caff. cit. (1)		2 9	1 7	1 0
54	1,000	Phenolphthaleini gr. 1		1 4	0 11	0 7
60	1,000	Phenolphthaleini gr. 2		1 4	1 0	0 8
87	1,000	Phenolphthaleini gr. 5		1 6	1 2	0 9
51	1,000	Potassii bicarbonatis gr. 5		1 3	1 0	0 7
57	1,000	Potassii bromidi gr. 5		1 3	1 0	0 8
16	1,000	Potassii chloratis gr. 5		0 9	0 7	0 6
22	1,000	Potassii chloratis et boracis gr. 5		0 11	0 8	0 6
05	1,000	Potassii chlor. et bor. et cocain. (gr. $\frac{1}{250}$)	C	2 0	1 3	0 10
87	1,000	Quininæ ammon. ♏ 30		1 10	1 1	0 9
36	1,000	Quininæ ammon. ʒj.		2 6	1 6	1 0
68	1,000	Quininæ ammon. et cinnam. ʒj.		2 11	1 8	1 1
84	1,000	Quininæ bisul. gr. 1		1 9	1 2	0 9
65	1,000	Quininæ bisul. gr. 2		2 11	1 8	1 1
13	500	Quininæ bisul. gr. 3		3 9	2 0	1 2
80	500	Quininæ bisul. gr. 5		5 9	3 1	1 9
16	500	Quininæ ethyl carb. gr. 5		8 9	4 8	2 6
96	1,000	Quininæ hydrobrom. gr. 1		2 0	1 2	0 10
82	1,000	Quininæ hydrobrom. gr. 2		3 5	2 0	1 1
82	1,000	Quininæ hydroch. gr. 2		3 5	2 0	1 1
38	500	Quininæ hydroch. gr. 3		4 7	2 6	1 6
19	500	Quininæ hydroch. gr. 5		7 0	3 8	2 0
98	1,000	Quininæ salicyl. gr. 2		3 5	2 0	1 1
22	500	Quininæ salicyl. gr. 5		7 0	3 8	2 0
87	1,000	Rhei (3) et sod. bic. (2)		1 11	1 2	0 9
87	1,000	Rhei (3) zingib. (½) sod. bic. (1½)		1 9	1 2	0 10
78	1,000	Rhei pil. co. gr. 4		1 9	1 1	0 9
67	1,000	Rhei pulv. co. gr. 5		1 6	0 11	0 7
48	1,000	Saccharini 550 gr. 0.3 (500—200—100)		3 3	1 7	1 0
70	1,000	Salicini gr. 5		4 5	2 6	1 5
23	1,000	Salol. gr. 5		2 4	1 4	0 11
35	100	Santonini gr. 1		—	—	5 3
42	100	Santonini co. B.P.C.		—	—	5 9
35	250	Santonini (½) et hyd. subchl. (½)		—	—	3 1
3	1,000	Soda-mint gr. 5		0 9	0 7	0 6
22	1,000	Sodii bicarbonatis gr. 5		0 9	0 7	0 6
2	1,000	Sodii citratis gr. 2		1 1	0 9	0 7
3	1,000	Sodii citratis gr. 5		1 6	1 1	0 9
08	1,000	Sodii phosph. ac. (5) hexamin. (5)		2 0	1 3	0 10
9	500	Sulphonal gr. 5	C	5 0	2 8	1 6
1	1,000	Sulph. præcip. (5) et pot. bitart. (1)		1 5	1 0	0 8
9	1,000	Syr. Eastoni ♏ 30	B	1 6	1 0	0 8
1	1,000	Syr. Eastoni ʒj.	B	2 3	1 4	0 10
2	1,000	Syr. glyceroph. co. ♏ 30	C	2 11	1 9	1 1
1	1,000	Syr. hypoph. co. ʒj.	C	2 3	1 4	0 11
02	1,000	Theobrom. et sod. sal. gr. 5		3 5	1 11	1 2
08	100	Theophyllin-sod. acet. gr. 4		—	8 4	4 3
1	500	"Three bromides"		2 3	1 4	0 10
3	1,000	"Three syrups"	C	2 8	1 7	1 0
9	1,000	"Three valerianates"		5 0	2 8	1 6
3	100	Trypsogen		per	doz.	1 4

Tabellæ, Hypodermic
(Tubes of ten tablets)

Cost d.	per	Tabellæ, Hypodermic		Sell per	s. d.
63	doz.	Adrenalini gr. $\frac{1}{200}$		tube	0 10
72	doz.	Apomorphinæ hydrochloridi gr. $\frac{1}{10}$	C	tube	0 11
52	doz.	Atropinæ sulphatis gr. $\frac{1}{100}$	B	tube	0 8
75	doz.	Caffeinæ sodio-salic. gr. ½		tube	1 0
60	doz.	Cocainæ hydrochloridi gr. $\frac{1}{10}$	B, F	tube	0 9
66	doz.	Cocainæ hydrochloridi gr. ⅛	B, F	tube	0 10
72	doz.	Cocainæ hydrochloridi gr. ⅙	B, F	tube	0 11
87	doz.	Cocainæ hydrochloridi gr. ¼	B, F	tube	1 1
111	doz.	Cocainæ hydrochloridi gr. ½	B, F	tube	1 4
52	doz.	Diamorphinæ hydrochloridi gr. $\frac{1}{12}$	B, F	tube	0 9
52	doz.	Diamorphinæ hydrochloridi gr. ⅙	B, F	tube	0 9
45	doz.	Digitalini gr. $\frac{1}{100}$	B	tube	0 7
51	doz.	Hyoscinæ hydrobromidi gr. $\frac{1}{200}$	B	tube	0 8
63	doz.	Morphinæ sulphatis gr. ⅛	B, F	tube	0 9
63	doz.	Morphinæ sulphatis gr. ⅙	B, F	tube	0 9
63	doz.	Morphinæ sulphatis gr. ¼	B, F	tube	0 9
63	doz.	Morphinæ sulphatis gr. ½	B, F	tube	0 9
63	doz.	Morph. sulph. (⅛) et atrop. sulph. ($\frac{1}{200}$)	B, F	tube	0 9
63	doz.	Morph. sulph. (⅙) et atrop. sulph. ($\frac{1}{180}$)	B, F	tube	0 9
63	doz.	Morph. sulph. (¼) et atrop. sulph. ($\frac{1}{150}$)	B, F	tube	0 9
63	doz.	Morph. sulph. (¼) et atrop. sulph. ($\frac{1}{100}$)	B, F	tube	0 9
78	doz.	Morph. sulph. (⅓) et atrop. sulph. ($\frac{1}{120}$)	B, F	tube	0 9
78	doz.	Morphinæ tartratis gr. ⅛	B, F	tube	1 0
81	doz.	Morphinæ tartratis gr. ¼	B, F	tube	1 0
51	doz.	Physostigminæ salicylatis gr. $\frac{1}{100}$	B	tube	0 7
69	doz.	Pilocarpinæ nitratis gr. $\frac{1}{10}$	B	tube	0 11
87	doz.	Pilocarpinæ nitratis gr. ¼	B	tube	1 1
99	doz.	Pilocarpinæ nitratis gr. ⅓	B	tube	1 2
75	doz.	Quininæ hydrobrom. gr. ½		tube	1 1
51	doz.	Strophanthin $\frac{1}{100}$—$\frac{1}{500}$	B	tube	0 8
51	doz.	Strychninæ hydrochloridi gr. $\frac{1}{50}$	B	tube	0 8
51	doz.	Strychninæ hydrochloridi gr. $\frac{1}{30}$	B	tube	0 8
51	doz.	Strychninæ sulphatis gr. $\frac{1}{100}$	B	tube	0 8
51	doz.	Strychninæ sulphatis gr. $\frac{1}{30}$	B	tube	0 8

Organotherapeutic Tablets

The term gland is used as a synonym for the desiccated material, and the figures in brackets indicate the approximate equivalence of desiccated and fresh material.

Cost d.	per	Organotherapeutic Tablets	Selling Price (in containers) 100 s. d.	50 s. d.	25 s. d.
168	1,000	Cerebrinin (1-7) gr. ¾	2 10	1 8	1 1
240	1,000	Corpus luteum (1-5) gr. ½	4 0	2 3	1 3
480	1,000	Corpus luteum (1-5) gr. 1	7 5	4 0	2 2
168	1,000	Didymin (1-7) gr. ¾	2 10	1 8	1 1
270	1,000	Duodenin (1-7) gr. ¾	4 5	2 5	1 4
210	1,000	Lymphatic (1-7) gr. ¾	3 6	2 0	1 1
168	1,000	Mammary (1-8) gr. ¾	2 10	1 9	1 1
228	1 000	Ovarian (1-6) gr. ½	3 9	2 0	1 2
392	1,000	Parathyroid (1-10) gr. $\frac{1}{20}$	5 10	3 2	1 9
555	1,000	Parathyroid (1-10) gr. $\frac{1}{10}$	8 9	4 7	2 5
246	1,000	Parathyroid gr. $\frac{1}{40}$, calc. lact. gr. 5	4 1	2 3	1 4
444	1,000	Pituitary (whole) (1-5) gr. ½	7 0	3 8	2 0
840	1,000	Pituitary (whole) (1-5) gr. 1	12 6	6 9	3 5
690	1,000	Pituitary ant. (1-5) gr. 1	10 6	5 5	2 10
600	1,000	Pituitary post. (1-6) gr. $\frac{1}{12}$	9 3	4 10	2 6
240	1,000	Placenta (1-6) gr. 1	4 0	2 3	1 2
228	1,000	Prostate (1-6) gr. 1	3 9	2 0	1 2
240	1,000	Spleen (1-5) gr. 1	4 0	2 3	1 2
270	1,000	Suprarenal (1-5) gr. 1	4 7	2 6	1 4
261	1,000	Thymus (1-6) gr. 1	4 3	2 4	1 4
45	1,000	Thyroid gr. $\frac{1}{20}$	1 2	0 10	0 7
51	1,000	Thyroid gr. $\frac{1}{10}$	1 3	0 10	0 7
51	1,000	Thyroid gr. ¼	1 3	0 10	0 7
63	1,000	Thyroid gr. ½	1 6	0 11	0 7
93	1,000	Thyroid gr. 1	1 11	1 2	0 9
135	1,000	Thyroid gr. 2	2 6	1 6	0 11
186	1,000	Thyroid gr. 3	3 3	1 10	1 1
282	1.000	Thyroid gr. 5	4 7	2 6	1 6

Cost d.	Cost per	Solvellæ		Selling Price (in containers) 100 s. d.	50 s. d.	25 s. d.
50	1,000	Alum. et zinci sulph. aa. gr. 15		3 2	1 9	1 1
180	1,000	Alum. et zinci s'carb. aa. gr. 30		3 3	1 11	1 2
96	1,000	Boracis co. B.P.C.		2 0	1 3	0 10
198	1,000	Hyd. perchlor. gr. 8.75	*B*	3 6	2 0	1 4
492	1,000	Hyd. et pot. iod. gr. 8.75	C	8 0	4 3	2 4
108	1,000	" Mouth-wash. eff."		2 0	1 3	0 10
57	1,000	Nasal., alk. N.H.I.		1 6	1 1	0 9
66	1,000	Nasal., alk. co. gr. 10		1 8	1 1	0 9
99	1,000	Nasal., eucal. co. gr. 18		2 0	1 3	0 10
111	1,000	Nasal., phenol. co. gr. 15		2 3	1 4	0 11
160	1,000	Nasal-pharyng. co. N.I.F.		3 0	1 9	1 1
87	1,000	Sodii chloridi gr. 60		1 10	1 2	0 10

Surgical Dressings and Appliances

Cost d.	Cost per	Bandages (Completely wrapped)	Sell	s. d.
		Calico, bleached : M.O.H.		
16	doz.	2 in.× 4 yd.	each	0 3
19·5	doz.	2½ in. × 4 yd.	each	0 4
22·5	doz.	3 in. × 4 yd.	each	0 5
		Calico, unbleached : M.O.H.		
14·5	doz.	2 in. × 4 yd.	each	0 2
17·5	doz.	2½ in. × 4 yd.	each	0 3
21	doz.	3 in. × 4 yd.	each	0 4
		Crepe, cream or flesh : M.O.H.		
68	doz.	2 in.	each	0 11
86	doz.	2½ in.	each	1 1
102	doz.	3 in.	each	1 4
120	doz.	3½ in.	each	1 6
138	doz.	4 in.	each	1 9
		Domette : M.O.H.		
58	doz.	2 in. × 6 yd.	each	0 9
72	doz.	2½ in. × 6 yd.	each	0 10
84	doz.	3 in. × 6 yd.	each	1 0
		Elastic web : M.O.H.		
54	doz. yds.	2 in.	per yd.	0 9
63	doz. yds.	2½ in.	per yd.	0 10
75	doz. yds.	3 in.	per yd.	1 0
		Flannel (wool) : M.O.H.		
72	doz.	2½ in. × 4 yd.	each	0 10
132	doz.	3 in. × 6 yd.	each	1 5
		Indiarubber : M.O.H.		
204	doz.	3 ft. × 2½ in., plain	each	2 3
252	doz.	3 ft. × 2½ in., perforated	each	2 8
252	doz.	3 ft. × 3 in., plain	each	2 8
299	doz.	3 ft. × 3 in., perforated	each	3 2
264	doz.	5 ft. × 2½ in., plain	each	3 5
300	doz.	5 ft. × 2½ in., perforated	each	4 0
300	doz.	5 ft. × 3 in., plain	each	3 9
396	doz.	5 ft. × 3 in., perforated	each	4 5
396	doz.	7½ ft. × 2½ in., plain	each	4 9
432	doz.	7½ ft. × 2½ in., perforated	each	5 6
492	doz.	7½ ft. × 3 in., plain	each	6 0
576	doz.	7½ ft. × 3 in., perforated	each	6 8
		Muslin, bleached : M.O.H.		
16	doz.	2½ in. × 6 yd.	each	0 3
20	doz.	3 in. × 6 yd.	each	0 4
27	doz.	4 in × 6 vd.	each	0 5
		Open wove, white (water dressing) : M.O.H.		
50	gross	1 in. × 3 yd.	each	0 1
84	gross	1½ in. × 4 yd.	each	0 2
108	gross	2 in. × 4 yd.	each	0 3
		Open wove, white (water dressing): M.O.H. —cont.		
132	gross	2½ in. × 4 yd.	each	0 3
156	gross	3 in. × 4 yd.	each	0 3
294	gross	4 in. × 6 yd.	each	0 4
441	gross	6 in. × 6 yd.	each	0 6
		Plaster of Paris : M.O.H.		
120	doz.	2 in. × 5 yd.	each	1 6
138	doz.	2½ in. × 5 yd.	each	1 9
156	doz.	3 in. × 5 yd.	each	2 0
180	doz.	4 in. × 5 yd.	each	2 3
		Ambulance, fast edge :		
54	doz.	2 in. × 6 yd.	each	0 8
66	doz.	2½ in. × 6 yd.	each	0 9
78	doz.	3 in. × 6 yd.	each	0 10
		Ambulance, loose edge :		
171	gross	2 in. × 6 yd.	each	0 3
210	gross	2½ in. × 6 yd.	each	0 3
246	gross	3 in. × 6 yd.	each	0 4
		Binders, twill :		
36	each	12 in. × 54 in.	each	5 3
40	each	18 in. × 54 in.	each	7 0
8	each	Suspensory, cotton, best	each	1 2
30	doz.	Triangular, plain	each	0 6

Cost d.	Cost per		Selling Price 16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
7	lb.	Tow	1 2	—	—	—
9	lb.	Tow, carbolised	1 4	—	—	—
		First-Aid Cases (refills)				
5	doz.	Finger dressings	doz.	0 10	—	—
9	doz.	Hand dressings	doz.	1 4	—	—
13	doz.	Body dressings	doz.	2 0	—	—
7	doz.	Burn dressings, finger	doz.	1 2	—	—
9	doz.	Burn dressings, small	doz.	1 6	—	—
16	doz.	Burn dressings, large	doz.	2 4	—	—
10	doz.	Cotton wool (¼ oz.)	doz.	1 6	—	—
12	doz.	Cotton wool (½ oz.)	doz.	1 9	—	—
13	doz.	Eye pad	doz.	3 6	—	—
6.5	lb.	Cellulose wadding	per lb.	1 0	—	—
12	lb.	Cellulose tissue	per lb.	1 9	—	—
24	ea.	Elastoplast bandage, 2½ in.	ea.	2 10	—	—
30	ea.	Elastoplast bandage, 3 in.	ea.	3 6	—	—
22	ea.	Paragon Elastoplast, 2½ in.	ea.	2 4	—	—
26	ea.	Paragon Elastoplast, 3 in.	ea.	2 7	—	—
14	ea.	Viscopaste bandage, 3½ in. ×6yds.	ea.	1 9	—	—
		Emp. adhesiv., spools :				
16	doz.	½ inch× 1 yd.	ea.	0 4	—	—
90	doz.	½ inch × 5 yd.	ea.	1 2	—	—
138	doz.	½ inch × 10 yd.	ea.	1 9	—	—
24	doz.	1 inch × 1 yd.	ea.	0 6	—	—
129	doz.	1 inch × 5 yd.	ea.	1 8	—	—
228	doz.	1 inch × 10 yd.	ea.	2 10	—	—
210	doz.	2 inch × 5 yd.	ea.	2 8	—	—
		Cotton-wool (net weight pkts.)				
14	doz.	Medium (M.O.H.) oz.	—	—	0 2	—
39·5	doz.	Med. (M.O.H.) 4 oz.	—	0 7	—	—
141	doz.	Med. (M.O.H.) 16 oz.	1 6	—	—	—
24	doz.	Superfine, oz. cartons	—	—	0 3	—
66	doz.	Superfine, 4 oz. packets	—	0 8	—	—
240	doz.	Superfine, 16 oz.	2 9	—	—	—
21	doz.	Boric, oz.	—	—	0 3	—
70	doz.	Boric, 4 oz.	—	0 9	—	—
240	doz.	Boric, 16 oz.	2 9	—	—	—

Catheters, gum-elast. : cost 6d. each, sell **1s. 0d.** Catheters, soft rubber Jaques (to size 12) : cost 5½d. ea., sell **10d.** over size 12, **1s. 0d.**

Gauzes (M.O.H. sealed packets)		3 yd.		1 yd.		½ yd.	
		Cost doz. d.	Sell each s. d.	Cost doz. d.	Sell each s. d.	Cost doz. d.	Sell each s. d.
Absorbent sterilised		42	0 6	17	0 3	10	0 2
Absorbent plain		41	0 6	16	0 3	9	0 2
Boric		48	0 8	19	0 3	12	0 2
Carbolic		48	0 8	20	0 3	12	0 2
Double cyanide	*B*	51	0 9	21	0 4	13	0 2
Iodoform		64	0 10	28	0 5	16	0 3
Picric		64	0 10	28	0 5	16	0 3
Salalembroth	*C*	51	0 9	21	0 4	12	0 2
Sublimate	*C*	51	0 9	21	0 4	12	0 2

Cost			Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
54	doz.	Gauze tissue, 4 oz. M.O.H.	—	0 9	—	—
183	doz.	Gauze tissue, 16 oz. M.O.H.	2 0	—	—	—
		Lints, M.O.H. (sealed pkts.)				
204	doz.	Plain, 16 oz.	2 4	—	—	—
108	doz.	Plain, 8 oz.	8 oz.	1 3	—	—
57	doz.	Plain, 4 oz.	—	0 9	—	—
31	doz.	Plain, 2 oz.	—	2 oz.	0 5	—
17.5	doz.	Plain, 1 oz.	—	—	0 3	—
159	doz.	Boric, 16 oz.	1 10	—	—	—
86	doz.	Boric, 8 oz.	8 oz.	1 0	—	—
44	doz.	Boric, 4 oz.	—	0 7	—	—
24	doz.	Boric, 2 oz.	—	2 oz.	0 4	—
17.5	doz.	Boric, 1 oz.	—	—	0 3	—
264	doz.	**Ice Bags** Check circ. 9 in.	ea.	2 9	—	—
278	doz.	Rubber black, 9 in.	ea.	3 0	—	—

Protectives (M.O.H.)		12in. × 12in.		12in. × 18in		36in. × 36in.	
		Cost doz. s. d.	Sell each s. d.	Cost doz. s. d.	Sell each s. d.	Cost doz. s. d.	Sell each s. d.
Gutta percha	doz.	42	0 6	—	—	252	3 0
aconet	doz.	36	0 6	—	—	180	3 6
Oiled silk	doz.	—	—	70	1 6	396	5 6
Oiled cambric	doz.	39	0 6	—	—	288	3 6

Serological Products—
Abridged List

		Selling Price			
		A. & H. s. d.	B. W. s. d.	P. D. s. d.	Evans s. d.
Bacillus coli	10 c.c.	—	3 6	—	—
Dick Test Products	test and control 1 c.c.	—	1 6	—	1 6
Diphtheria (conc.)	500 units	1 6	1 6	1 3	1 3
Diphtheria conc.	1,000 units	2 0	2 0	—	1 9
Diphtheria conc.	2,000 units	3 3	3 3	3 6	3 3
Diphtheria conc.	3,000 units	—	4 9	5 0	5 0
Diphtheria, conc.	4,000 units	6 0	6 0	6 0	6 0
Diphtheria, conc.	6,000 units	8 9	8 9	8 9	8 9
Diphtheria, conc.	8,000 units	9 6	9 6	9 6	9 6
Diphtheria, prophyl. A.P.T.	1 c.c.	—	4 0	—	3 6
Diphtheria, prophyl. A.P.T.	5 c.c.	—	16 0	—	—
Diphtheria, prophyl. A.P.T.	10 c.c.	—	—	—	21 0
Diphtheria, prophyl. F.T.		—	2 6	—	2 0
Diphtheria, prophyl. T.A.F.	1 c.c.	—	3 0	—	3 0
Diphtheria, prophyl. T.A.M.		—	2 6	—	2 6
Dysentery	20 or 25 c.c.	—	8 6	8 6	—
Dysentery conc.	10,000 units	8 6	—	—	—
Erysipelas streptococcus ant.	10 c.c.	—	—	—	15 0
Gas gangrene (perfringens)	4,000 units	6 6	6 6	6 6	—
Gas gangrene (perfringens)	10,000 units	15 0	15 0	15 0	—
Hæmostatic	2 c.c.	—	—	—	5 0
Hemoplastin	2 c.c.	—	—	6 0	—
Hemoplastin, oral	5 c.c.	—	—	9 6	—

Serological Products—
Abridged List—*cont.*

		Selling Price			
		A. & H. s. d.	B. W. s. d.	P. D. s. d.	Evans s. d.
Immunogens, various	10 c.c.	—	—	12 6	—
Influenza (equine)	30 c.c.	—	—	8 0	—
Meningococcus antitox.	10,000 units 30 c.c.	—	—	30 0	—
Meningococcus	3 c.c. conc. = 10 c.c.	3 6	3 6	—	—
Meningococcus	5 c.c. conc. = 15 c.c.	5 0	—	—	—
Meningococcus	20 c.c.	—	—	—	—
Meningococcus	25 c.c.	—	8 6	—	—
Meningococcus	10 c.c. conc. = 30 c.c.	10 0	—	—	—
Normal (horse)	10 c.c.	1 6	1 6	—	1 6
Normal (horse)	25 c.c.	3 0	3 0	—	3 0
Phylacogens (boxes of 5)	1 c.c.	—	—	9 0	—
Phylacogens	10 c.c.	—	—	11 8	—
Pneumococcus conc. Type 1	4,000 units	4 0	—	—	—
Pneumococcus Type 1	20,000 units	—	30 0	—	—
Pneumococcus Type 1 high potency (unconc.)	25,000 units	—	20 0	—	—
Pneumococcus anti (Felton) Types 1 & 2	10,000 units	—	30 0	33 9	—
Pneumococcus anti (Felton) Types 1 & 2	20,000 units	—	—	65 0	—
Pneumococcus Type 2	25,000 units	—	20 0	—	—
Pneumococcus Type 2 conc.	20,000 units	—	30 0	—	—
Poliomyelitis serum, anti	5 c.c.	7 6	—	—	—
Puerperal streptococcus, ant.		—	—	—	15 0
Scarlet fev. strept. ant.	10 c.c.	—	—	12 6	12 6
Scarlet fev. strept. ant.	30 c.c.	—	—	32 0	32 0
Schick Test Products	1 c.c. per set	—	2 6	—	2 6
Schick Test Products	5 c.c. per set	—	8 6	18 0	8 6
Staphylococcus, antitoxin conc.	3 c.c.	3 6	—	—	—
Staphylococcus conc	10 c.c.	10 6	10 6	—	—
Streptococcus, erysipelas	25 c.c.	8 6	8 6	—	—
Streptococcus, erysipelas ant.	10 c.c.	—	—	—	15 0
Streptococcus, polyval.	10 c.c.	3 6	3 6	4 7	3 6
Streptococcus, polyval. conc.	10 c.c.	10 6	—	24 0	—
Streptococcus, polyval. conc.	20 c.c.	—	—	—	6 6
Streptococcus, polyval.	25 c.c.	8 6	8 6	8 6	—
Streptococcus, puerp. fever	10 c.c.	3 6	3 6	—	—
Streptococcus, puerp. fever	25 c.c.	8 6	8 6	—	—
Streptococcus, puerperal ant.	10 c.c.	—	—	—	15 0
Streptococcus (scarlatina) 10 c.c.	3,000 U.S.A. units	—	12 6	—	—
Tetanus :—					
1,000 international units		1 6	1 9	2 0	1 9
3,000 international units		4 0	4 0	4 7	4 0
10,000 international units		12 0	—	—	12 0
16,000 international units		17 6	—	—	—
20,000 units		—	—	25 0	—
Thromboplastin	20 c.c.	—	—	5 3	—
Typhoid	25 c.c.	—	8 6	—	—

Veterinary Sera

		Selling Price			
		A. & H. s. d.	B. W. s. d.	P. D. s. d.	Evans s. d.
Anti-leptospira (canine)	10 c.c.	—	3 6	—	—
Lamb dysentery	100 c.c.	—	18 0	—	—
Streptococcus (equine)	30 c.c.	—	—	8 0	—
Swine erysipelas	10 c.c.	—	1 0	—	1 0
Swine erysipelas	100 c.c.	—	6 0	—	6 0
Tetanus	1,000 units	—	—	—	1 6
Tetanus	2,000 units	—	2 6	—	—
Tetanus	3,000 units	—	—	—	3 3
Tetanus	6,000 units	—	5 0	—	5 0
Tetanus (vet.) American	3,000 units	—	5 0	6 0	—
Tetanus (vet.) ,,	5,000 units	—	—	9 6	8 0
Tetanus (vet.) ,,	10,000 units	—	—	—	15 0
White scour (bovine)	10 c.c.	—	—	4 0	—
White scour (bovine)	30 c.c.	—	—	8 0	—

Veterinary Vaccines

	Selling Price	
	B. W. s. d.	Evans s. d.
Bacillus abortus (killed), 10 c.c.	—	4 6
Bacillus abortus (killed), 25 c.c.	—	7 6
Bacillus abortus (living), 25 c.c.	7 6	3 6
Bacillus abortus, 30 c.c.	7 6	—
Blackleg pilules or cords single, 10 doses	—	5 6
Blackleg pilules, whole culture 25 c.c.	—	3 9
Blackleg pilules, whole culture 50 c.c.	—	7 0
Improved braxy prophylactic 50 c.c.	7 3	7 0
Improved braxy prophylactic 250 c.c.	22 8	21 0
Leptospira (canine) 1 c.c.	2 6	—
Leptospira (canine) 10 c.c.	15 0	—
Lamb dysentery prophylactic 50 c.c.	7 3	7 6
Lamb dysentery prophylactic 250 c.c.	22 8	22 6
Mastitis 10 c.c.	—	4 6
Mastitis 25 c.c.	—	7 6
Roup 10 c.c.	—	2 6
Roup 25 c.c.	—	4 6
Roup 100 c.c.	—	14 6
Swine erysipelas (living) 5 c.c.	0 10	1 0
Swine erysipelas (living) 25 c.c.	3 4	3 6

Vaccines

	Selling Price					
	A. & H. s. d.	B. W. s. d.	P. D. s. d.	D. F. s. d.	Evans s. d.	Jenner s. d.
Acne, mixed (10 mill. acne, 250 mill. staphyl.) .. 1 c.c.	2 6	2 6	—	3 0	2 9	2 6
Acne, mixed (500 mill. each, acne, etc.) .. .. 1 c.c.	2 6	2 6	—	—	2 9	—
Acne, mixed (20 mill. acne, 1,000 mill. staphyl.) 1 c.c.	—	—	3 0	—	2 9	—
Catarrh, mixed .. 1 c.c.	2 6	—	3 0	3 0	2 9	2 6
Cholera (various) .. 1 c.c.	2 6	2 6	3 0	2 6	2 9	—
Coley's fluid .. .. 2 c.c	7 6	—	—	—	—	—
Colon bacillus (various) 1 c.c.	—	2 6	—	2 6	2 9	2 6
Coryza, mixed (various) ..	—	2 6	3 0	—	2 9	2 6
Gonococcus (various) 1 c.c.	2 6	2 6	3 0	3 0	2 9	2 6
Hay fever reaction outfit ..	—	—	6 0	—	—	—
Influenza (various) .. 1 c.c.	2 6	—	3 0	3 0	2 9	2 6
Influenza-pneumonia ..	—	2 6	3 0	3 0	2 9	—
Meningococcus .. 1 c.c.	—	—	3 0	3 6	2 9	—
Pneumobacillus (Friedlaender) 1 c.c.	—	—	—	—	2 9	—
Pneumococcus (various) ..	2 6	2 6	3 0	3 0	2 9	2 6
Pollen toxin diagnostic ..	—	—	2 0	—	—	—
Rheumatic	—	2 6	3 0	2 6	2 9	2 6
Sepsis, mixed	—	—	3 0	—	—	—
Staphylococcus (various) ..	2 6	2 6	3 0	2 6	2 9	2 6
Streptococcus, polyval. 1 c.c.	2 6	2 6	3 0	2 6	2 9	2 6
Streptococcus, rheum. 1 c.c.	2 6	2 6	—	—	2 9	—
Typhoid (various strengths)..	2 6	2 6	3 0	2 6	2 9	2 6
Typhoid and paratyphoid ..	2 6	2 6	3 0	2 6	2 9	2 6
Typhoid, paratyphoid and cholera	2 6	2 6	3 0	—	—	—
Whooping cough, prophyl. ..	—	—	3 0	3 0	2 9	2 6
Whooping cough, treatment..	—	—	3 0	2 6	2 9	2 6

Tuberculins

	Selling Pri	
	B. W. s. d.	Ev s.
Undiluted Tuberculins Exotoxic		
Old tuberculin, human (T), 1 c.c.	1 6	1
Old tuberculin, human (T), 5 c.c.	6 0	6
Old tuberculin, bovine (P.T.) 1 c.c.	1 6	1
Old tuberculin, bovine (P.T.), 5 c.c.	6 6	6
Tuberculin bouillon filtrate human (T.O.A.) 1 c.c.	1 6	—
Tuberculin bouillon filtrate, human (T.O.A.) 5 c.c.	6 0	—
Tuberculin bouillon filtrate, bovine (P.T.O.) 1 c.c.	1 6	—
Tuberculin bouillon filtrate, bovine (P.T.O.) 5 c.c.	6 6	—
Tuberculin Dilutions		
Old tuberculin (T. or P.T.) and tuberculin bouillon filtrate (T.O.A. or P.T.O.)		
dilution up to 0.4 c.c. in 1 c.c.	1 0	1
dilution of 0.5 c.c. to 0.7 c.c. in 1 c.c.	1 3	1
dilution of 0.8 c.c. and 0.9 c.c. in 1 c.c.	1 6	1
Tubercle vaccine, bacillary emulsion (B.E.)		
dilutions up to 0.04 mgm. in 1 c.c.	—	1
dilutions of 0.05 mgm. to 0.7 mgm. in 1 c.c.	—	1
dilutions of 0.8 mgm. to 4 mgm. in 1 c.c.	—	1
Diagnostic		
Tuberculin (Mantoux tests) 100	—	7
Tuberculin von Pirquet (T, PT., and control), per set ..	—	1
Tuberculin von Pirquet, 25 per cent. sol.	—	1
Tuberculin human (von Pirquet reaction) carton	4 0	—
Tuberculin (vet. diagnosis) 4 c.c.	1 0	—
Tuberculin (vet. diagnosis) 30 c.c.	5 0	—
Tuberculin (vet. ophthalmic and intradermic reactions) 1 c.c.	1 6	—
Tuberculin (vet. ophthalmic and intradermic reactions) 5 c.c.	6 6	—

HINTS ON STOCKTAKING

Departmentalising a complex business like that of a chemist and druggist is the simplest way to control incoming and outgoing goods, and to gain an understanding of prices to be charged for the purpose of yielding suitable profits. Since stocktaking is the only safe way of knowing the movement of a business up or down, it follows that anything simplifying the operation of stocktaking possesses economic value. Writing down a few thousand names is the most thankless and time-wasting proposition a business man can devise. Stocktaking sheets, where 75 per cent. of the work required has been done, must of necessity possess a commensurate value equal to the time and labour saved. The *C. & D.* Retail Price List is compiled on sectional or departmental lines; it corresponds with the method of the Stocktaking Sheets, and provides a further step in simplifying the labours of stocktaking. Stock means goods that are for sale. Fixtures are items for the capital account and are valued separately. Before taking stock, arrange things so far as possible for estimating numbers and quantity. The *C. & D.* Stocktaking Pad, which sells at 2s. 6d., is arranged in sections, and the pricing arrangement is on a progressive basis to the final amount. The best way to use the stocktaking sheets is for one person to call out the quantity of the drug or chemical and for another assistant to enter this in the appropriate position on the stocktaking sheets, and if costs or prices are available at the time of entry of the quantity of the article, such amount should always be inserted at the same time. The sections or departments should have the stock taken separately, as the mind working on one section rhythmically reaches the end with the least expenditure of energy.

Pricing: The quantity-price should be that which is usually bought at reasonable intervals or used in dispensing, the aim in business being to turn stock over quickly, at least five to six times a year. The arrangement of the items in the Stocktaking Sheets corresponds with the *C. & D.* Retail Price List, and the prices in the latter are those current at the time of issue. When the stocktaking is finished, extend the cost by means of the *C. & D.* Retail Price List and transfer the total of each section to the specially ruled sheet for the summary provided at the end of the pad. Where articles are in bulk and a lb. price is given, subdivide or multiply as the case may need. Where syrups or glycerin are taken by volume, divide the lb. cost by 12 to get the fluid ounce cost. In the case of tinctures or spirits, where a lb. cost is given, divide the cost by 18 in order to get the price of a fluid ounce. The method is not uniformly accurate, but the margin of error is negligible. Where ounce cost is given, divide by 7 in order to get drachm price. Where drachm cost is given, divide by 50 in order to get the grain price. Stock lines other than drugs are set out where a common basis can be given. They are best arranged and grouped according to cost: 100 lines at *x*: and so on, but this presupposes that the stock is arranged in an orderly manner. Space is provided for such lines for which the details are not common to all businesses. Standardising stock lines in a chemist's business is extremely difficult, but much can be done to ease the burden of stocktaking if the idea of standardisation is practised wherever possible.

Printed in Great Britain for the Proprietors by Eyre and Spottiswoode Limited, His Majesty's Printers, East Harding Street, London, E.C.4, and
Published by the Proprietors, MORGAN BROTHERS (Publishers), Limited, at 28 Essex Street, Strand, London, W.C.2.